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Task Force

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Emergency Preparedness & Community Restoration

Final Report

Elihu M. Harris
Mayor of Oakland

Loni Hancock
Mayor of Berkeley

February 3, 1992



TASK FORCE ON EMERGENCY PREPAREDNESS AND COMMUNITY RESTORATION

MEMBERS

Elihu Harris	Mayor, City of Oakland (Co-Chair)
Loni Hancock	Mayor, City of Berkeley (Co-Chair)
Marge Gibson-Haskell	City Councilmember, City of Oakland
Warren Widener	Alameda County Supervisor
Dick Spees	City Councilmember, City of Oakland
Henry L. Gardner	Oakland City Manager
Michael F. Brown	Berkeley City Manager
Jim Brown	Alameda Building Trades Council
Gay Cobb	Private Industry Council
Admiral Robert Toney	Oakland Chamber of Commerce
Jeffrey Leiter	Business Representative, Berkeley
Ed Blakley	U.C. Berkeley, Dept. of City & Regional Planning
Gary Hambly	Building Industry Association
Maureen O'Neill	Oakland Development Council
Peter Smith	City of Oakland Planning Commission
Bob Harris	Pacific Gas & Electric
Doug Jones	Pacific Bell
Artis Dawson	East Bay Municipal Utility District
Jack Neureuter	Oakland Association of Insurance Agents
Brooke A. Levin	Office of the Mayor, City of Oakland
Constance M. Hosemann	Homeowners Representative, Oakland
Thad Kusmierski	Homeowners Representative, Berkeley
Claude Hutchinson	Civic Bank of Commerce



EXECUTIVE SUMMARY

The Task Force on Emergency Preparedness and Community Restoration, co-chaired by Berkeley Mayor Loni Hancock and Oakland Mayor Elihu Harris, was convened shortly after the October 20th firestorm to develop recommendations to help both communities facilitate restoration of the affected neighborhoods, mitigate against future fire hazards, and improve emergency preparedness and response. Over the past three months, the Task Force has been examining the lessons learned to improve the ability of both communities and their residents to prepare for, respond to, and recover from a major urban wildland fire.

On November 21, 1991, the Emergency Preparedness Committee of the Task Force, chaired by Oakland City Councilmember Marge Gibson-Haskell and County Supervisor Warren Widener, held a Public Hearing to solicit the concerns, experiences, and ideas of those who had experienced the fire. Over 200 residents attended the meeting signifying a strong desire on the part of the affected community to participate in the development of policy recommendations to prevent future disasters of this magnitude. Residents expressed a willingness to work with the City to mitigate fire hazards in the area, improve emergency response and recovery, and prepare for a swift rebuilding of the destroyed neighborhoods.

To facilitate the work of the Task Force and include citizen input in the policy-making process, six committees were established to develop policy recommendations in the following areas:

Emergency Preparedness:

Marge Gibson Haskell (Co-Chair)
Warren Widener (Co-Chair)

Issues: emergency service plans and coordination; preventive actions; citizen training; warning and alert systems; animal care and rescue.

Communications:

Constance Hosemann (Chair)
Jeff Leiter (Co-Chair)

Issues: citizen training; emergency response systems; providing information to residents and the media; emergency operations plans.

Forestry and Vegetation:

Ed Blakely (Chair)
Elan Shapiro (Co-Chair)

Issues: vegetation management; plant selection and design; watershed, open space, and land management; assessment district.

STRUCTURE OF THE POLYMER

As mentioned above, the polymerization of *n*-butyl acrylate in the presence of *n*-heptane at 50°C. gives a polymer which is soluble in benzene, *n*-heptane, and *n*-octane, but insoluble in ether, *n*-hexane, *n*-pentane, *n*-butane, *n*-propane, and *n*-heptane. The infrared spectrum of this polymer shows absorption bands at 3050, 1720, 1650, 1450, 1350, 1250, 1150, 1050, 950, 850, 750, 650, and 550 cm⁻¹. The absorption at 1720 cm⁻¹ is due to the carbonyl group of the acrylate group. The absorption at 1650 cm⁻¹ is due to the stretching of the C=C double bond. The absorption at 1450 cm⁻¹ is due to the stretching of the C-H bond. The absorption at 1350 cm⁻¹ is due to the stretching of the C-C bond. The absorption at 1250 cm⁻¹ is due to the stretching of the C-O-C bond. The absorption at 1150 cm⁻¹ is due to the stretching of the C-C bond. The absorption at 1050 cm⁻¹ is due to the stretching of the C-C bond. The absorption at 950 cm⁻¹ is due to the stretching of the C-C bond. The absorption at 850 cm⁻¹ is due to the stretching of the C-C bond. The absorption at 750 cm⁻¹ is due to the stretching of the C-C bond. The absorption at 650 cm⁻¹ is due to the stretching of the C-C bond. The absorption at 550 cm⁻¹ is due to the stretching of the C-C bond.

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Infrastructure and Development:

Bob Harris (Chair)
Dick Spees (Co-Chair)

Issues: undergrounding utilities; street widening and evacuation planning; traffic management; water supply; employment and contract opportunities.

Planning, Zoning and Design:

Peter Smith (Chair)
Fred Collignon (Co-Chair)

Issues: zoning regulations and permit process; design guidelines and review process; secondary units; architectural diversity; neighborhood participation; safety standards; parking requirements;

Each of the six committees was comprised of Task Force members, experts with specialized technical, legal, and administrative backgrounds, interested citizens, and residents of the fire area (a list of participants is included in the Appendix). City staff attended the meetings to update participants on current City policies and programs. Since early December 1991, each committee has met on a weekly basis and the Committee reports included in this document summarize the broad range of issues discussed and the major policy recommendations developed.

Although each committee met separately, many issues were discussed by more than one group since it is difficult to separate emergency planning, response, and recovery efforts. Throughout the process, several key concerns were emphasized including the need for increased citizen training in emergency preparedness and response; the need to upgrade firefighting equipment to improve response; the need to mitigate against future fires in the Hills; and the need to expedite the rebuilding process to the greatest extent possible. The Committees also recommend the use of a Citywide General Obligation Bond and assessment districts in the Oakland and Berkeley Hills to fund necessary improvements.

COMMITTEE RECOMMENDATIONS

Each committee has prepared a detailed summary of their findings, discussions, and policy recommendations which is included in the body of this report. The following list highlights some of the key recommendations covered therein:

EMERGENCY PREPAREDNESS

A. Incident Command System (ICS):

- Increase the regularity of ICS use to increase familiarity with the system.
- Expand the practice of ICS to include regular use by all levels of City and County government.
- Increase the number of ICS drills.

B. Planning for Infrastructure:

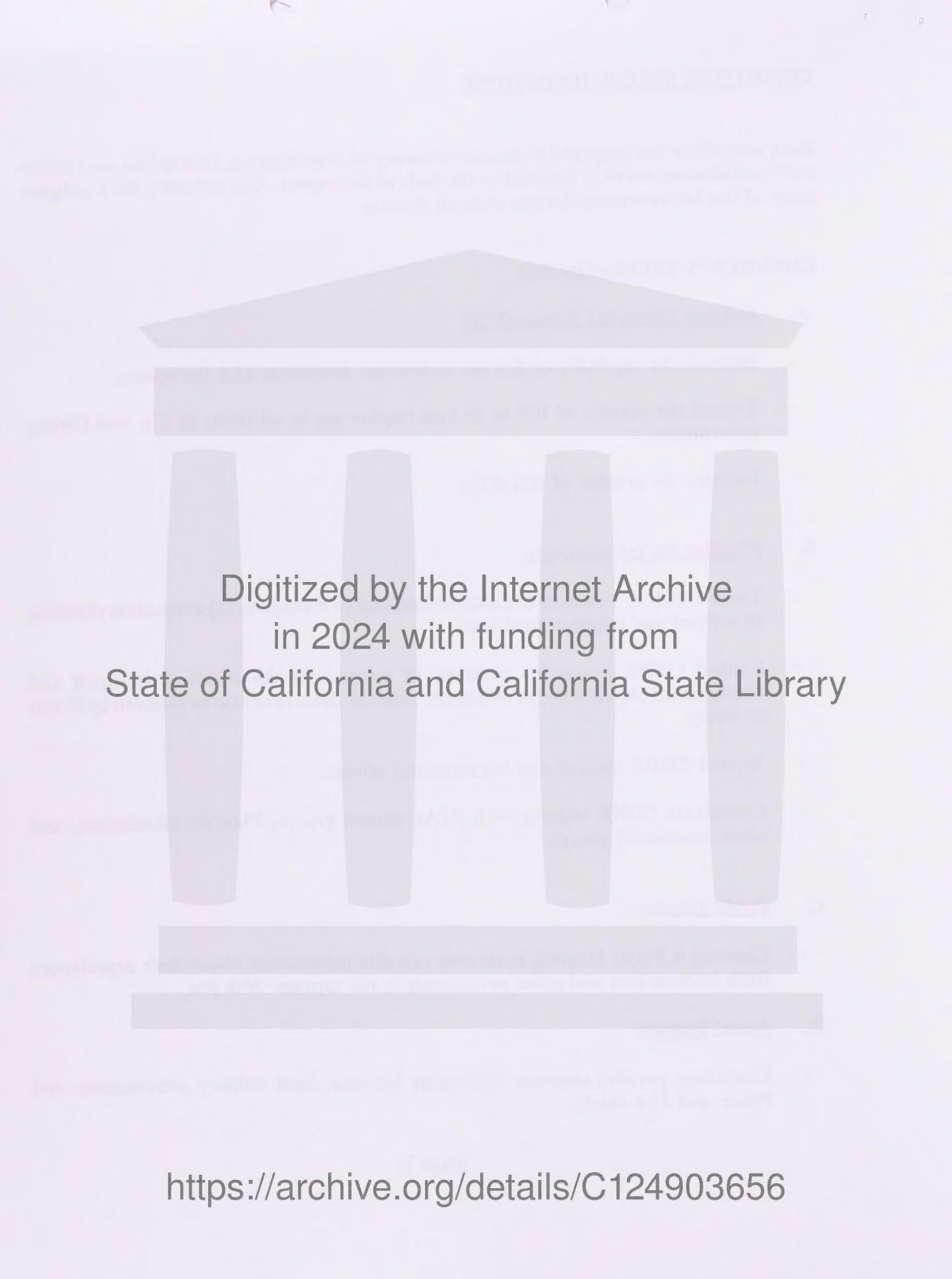
- Tailor C.O.R.E. (Citizens of Oakland Respond to Emergencies) evacuation planning to a street and neighborhood level.
- Expand CORE evacuation planning to account for the needs of bilingual and handicapped populations, as well as the needs of those temporarily disabled by illness or injury.
- Expand CORE training and informational efforts.
- Coordinate CORE training with PTAs, church groups, Phoenix associations, and other community groups.

C. Public Hearing:

- Convene a Public Hearing to receive valuable information about their experiences from homeowners and other participants in the October 20th fire.

D. Aerial Support:

- Encourage parallel structure familiarity between local military commanders and Police and Fire chiefs.



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- Formalize the emergency response roles of military personnel with regard to utilization of military aircraft for firefighting.
- Determine the availability of private vendors as well as County and State resources to provide on-call emergency aerial support.

E. Terrain Familiarity:

- Expand the information on the Oakland Hills fire hazard area that is currently on file in the Geographic Information System (GIS) of the California Department of Forestry.
- Expand firefighter training programs to include operation of the GIS system.
- Encourage or require homeowners to improve the visibility of house number identification.
- Increase the number of multi-jurisdictional drills.
- Encourage mutual aid agreements between neighboring jurisdictions.
- Equip fire hydrants with 2.5-inch adapters.

F. Volunteers:

- Provide options regarding appropriate levels of volunteer participation.
- In Berkeley, establish a volunteer disaster council.
- Encourage fire departments to develop procedures for using volunteers in emergency response.

G. Early Warning Systems:

- Fund installation of a system to integrate Cities into state Office of Emergency Services satellite communications system.
- Request that the state Legislature establish the East Bay urban-wildland interface as a special study zone.
- Establish critical weather conditions for initiating emergency response procedures.



- Develop a localized system for citizen reporting of severe weather conditions.

H. Funding:

- Develop a special assessment district for fire prevention activities in the East Bay Hills.
- Investigate the Fire District Consolidation Study to determine the best form of an assessment district for unincorporated areas.
- Establish a Joint Powers Agency to manage the special assessment district and request funding from the FEMA Hazard Mitigation Program.

I. Animal Care and Rescue:

- Develop a plan to address preparedness, response, and recovery activities pertaining to animal/pet care and rescue.
- Standardize pet information forms for lost and found pet information.
- Develop and maintain a database of volunteers interested in animal care and rescue.
- Allow residents needing temporary shelter to bring pets to shelters for first few hours after an emergency.

COMMUNICATIONS:

A. Citizen Training:

- Encourage and facilitate citizen training in emergency preparedness and fire prevention.
- Distribute information about city services, hazard mitigation, and emergency preparedness procedures to all citizens.
- Develop neighborhood evacuation maps and procedures.
- Educate Hill area residents on the value and necessity of vegetation management and brush removal.



B. Emergency Management Structure/Plans:

- Establish an appointed Emergency Management Board or Commission to help coordinate emergency preparedness activities and projects.
- Empower the Office of Emergency Services with lead responsibility for emergency information during and after an emergency.
- Update, implement and maintain existing Emergency Preparedness Plans including the Public Information Operations Manual.
- Establish a new position (or assign tasks) of "Neighborhood Liaison Officer to maintain neighborhood emergency preparedness plans and communications networks.

C. Improved Communications Systems:

- Complete the installation of Oakland's new 800 MHz Trunk System.
- Create a protocol to adequately train staff for "911" emergency dispatch operations.
- Investigate the use of computerized automatic telephone dialing systems to aid in alerting and warning.
- Establish an operational Emergency Incident Command Center.
- Establish an annual Emergency Preparedness Drill.
- Periodically test all communications equipment, plans, and procedures.

D. Providing Information to the Media and the Public:

- Neighboring cities should deploy compatible technologies in order to collect all information in an organized and useful fashion.
- Trained Public Information officers should be available at the emergency command centers and be prepared to talk with residents and the media.
- The media should have access to emergency sites in order to accurately provide information to the general public.



FORESTRY AND VEGETATION

A. Immediate Erosion Control:

- Minimize tree removal, grading, and debris removal in areas of significant erosion or landslide potential until the end of the rainy season (mid-April).
- Reinstate a simplified Tree Removal Permit process (no fee, 10 day processing period, no appeals) in the fire damaged area and inform insurance companies that deadlines for tree and debris removal in areas of landslide and erosion potential must wait until mid-April.
- Make detailed slope stability maps showing areas of high erosion and landslide potential available to the general public.
- Minimize the use of loose hay on slopes with extensive storm drain systems; avoid using jute or other netting on slopes containing unstable soils; avoid clearing or removing vegetation from stream corridors until after the rainy season.

B. Public Education:

- Implement a long-term public information program on vegetation management; immediately form a multi-disciplinary task force to develop this program.
- Develop a Design Handbook tailored to the East Bay Hills which outlines landscape design and vegetative management guidelines.
- Encourage homeowners associations to be involved in setting and maintaining vegetation management standards; support such organizations with enabling policy and technical assistance.

C. Vegetative Management Planning:

- Develop a coordinated vegetation management plan which includes design and maintenance standards for the entire fire hazard area; immediately form a technical advisory committee to develop this plan.
- For Urban Neighborhoods:
 - *Develop maintenance standards which mandate the regular mulching or composting of dead vegetative matter on the ground and in trees and shrubs; provide regular debris chipping and brush removal services.

- *Do not target particular species such as Blue Gum Eucalyptus or Monterey Pine for eradication or exemption from tree regulation policies, but require regular maintenance to reduce fire hazard.
- For Public Wildlands:
 - *Create and maintain fuelbreaks on wildlands along the urban-wildland interface to reduce the potential spread of wildfires.
 - *Use broad area treatments such as prescribed burning to reduce the buildup of surface fuels and undergrowth.
 - *Create a Joint Powers Agreement between East Bay jurisdictions to coordinate fuel management activities.
 - *Require a Special Fire Assessment District to periodically monitor public wildlands to insure that effective maintenance is employed.

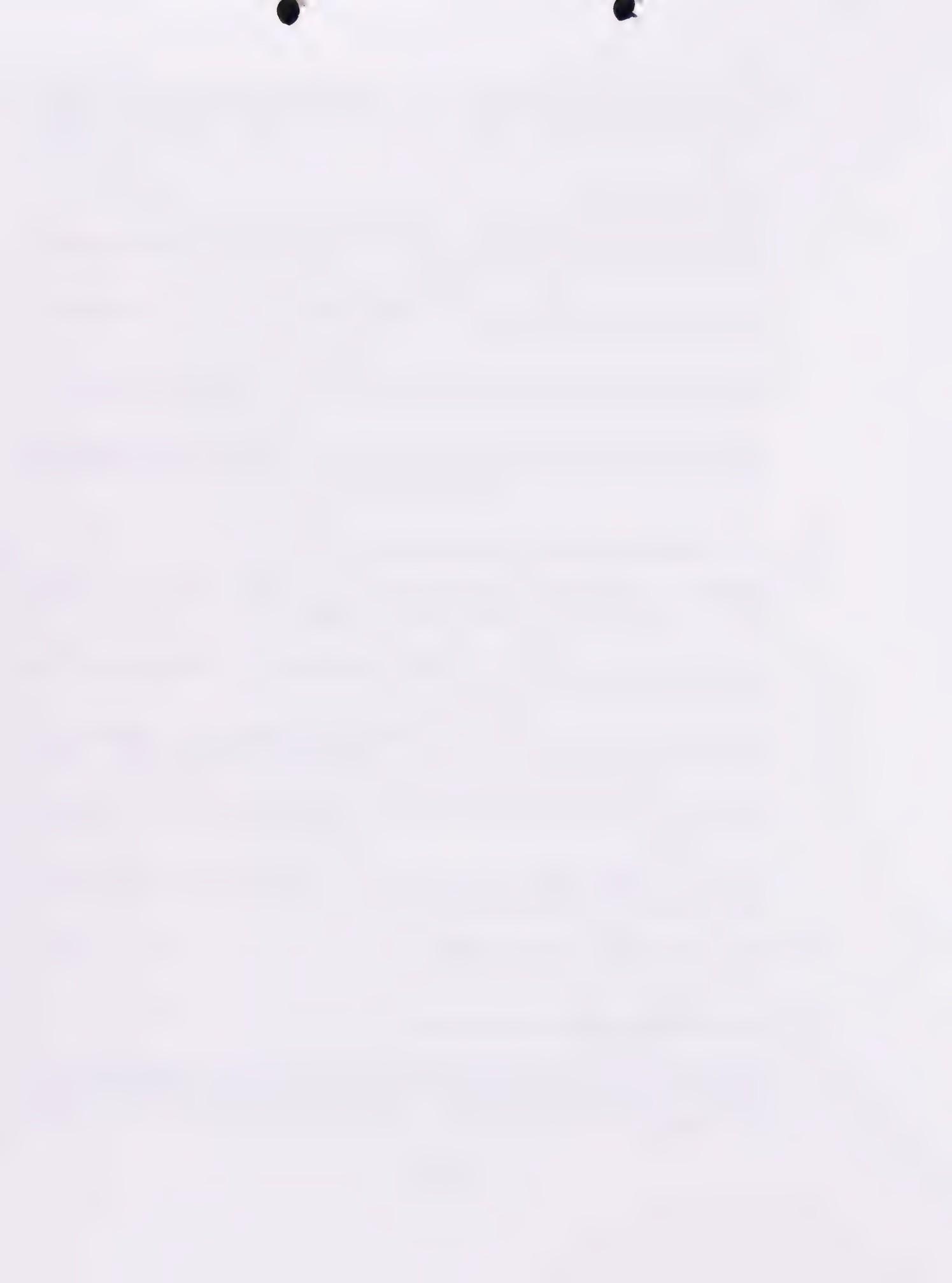
D. Environmental Regulation and Enforcement:

- Establish a Special Fire Assessment District to promote fire safety and fund vegetation management plan enforcement activities.
- Centralize responsibility for vegetative management plan administration and enforcement in a single department.
- Improve regulation and enforcement of vegetative management plans; require annual inspections of all properties in fire hazard areas to insure compliance.
- Implement codes to require landscape and maintenance plans as part of the building permit process.
- Require fire hazard inspections of all properties City-wide at the time of sale to insure compliance with fire safety codes.

INFRASTRUCTURE AND DEVELOPMENT

A. Street Widening and Evacuation Planning:

- Identify a minimum unobstructed street width for evacuation routes, emergency response routes, and residential streets. Implement through parking restrictions or street widening.



- Identify designated evacuation routes and emergency response routes through appropriate signage.
- Notify homeowners of decisions regarding parking restrictions and potential street widening projects.
- Conduct further analysis of the Fire Hazard Area to determine where special evacuation problems may lie.

B. Undergrounding of Utilities:

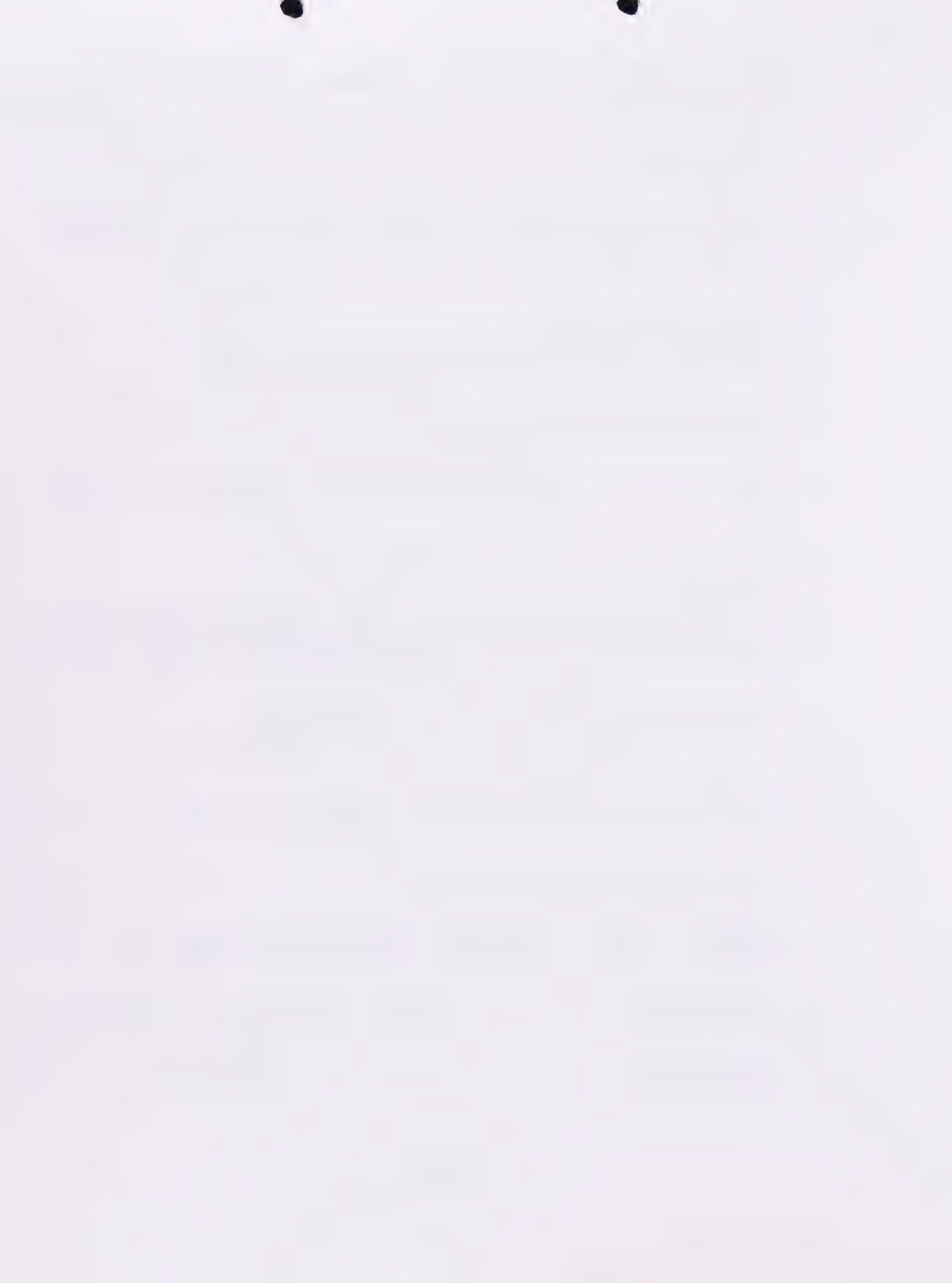
- Mandate that all homeowners underground the service laterals.
- Identify available funding sources to underground all utilities on the public right-of-way throughout the fire-damaged area.
- Work with PG&E to investigate the possibility of installing automatic gas valve shut-offs.

C. Water Supply:

- In cooperation with EBMUD, work to implement a modern firefighting strategy. Conduct a study to analyze fire flows; water pressure; the need for additional hydrants; reservoir capacity; and the need for backup power for pumps.
- Identify alternative sources of water for firefighting activities.
- Investigate use of above ground portable water delivery systems.
- Study the possible retrofit of hydrants with universal hose couplings.

D. Building Codes:

- Upgrade the current Building Code requirements for roofing materials, siding materials, and projections to prevent the spread of any future fires.
- Require Class A roofs for any re-roofing project in the designated Fire Hazard Area.
- Recommend the installation of sprinklers in extreme fire hazard areas in the Oakland Hills.



E. Employment Opportunities:

- Work with the Chamber of Commerce and the Private Industry Council to identify employment and business opportunities for Oakland residents and businesses as a result of the rebuilding effort.
- Work with the Private Industry Council and the Oakland Development Council to target training programs to the building trades.

PLANNING, ZONING AND DESIGN

A. Neighborhood Involvement:

- Design guidelines for individual neighborhoods should be developed.
- Neighborhood associations should be encouraged to develop voluntary architectural standards and design guidelines.
- All Homeowners' Associations within the fire area should receive copies of the "Applications on File" at the Community Restoration Development Center.
- Implement notice requirements for all applications for use permits and variances.
- Develop a process for conflict resolution.

B. Density:

- Develop mechanisms to help retain the existing density in neighborhoods.
- Illegal secondary units should not be automatically legalized.
- Develop new parking solutions to help alleviate parking problems associated with secondary units.
- Establish guidelines for the residential use of trailers and mobile homes during reconstruction.



C. **Lot Coverage:**

- Investigate the use of a Floor Area Ratio (F.A.R.) to limit the size of "new" structures.

D. **Setbacks/Slope/Coverage:**

- Conduct further analysis regarding zero lot lines.
- Encourage diversity in roof designs.
- Reduce the bulk of upslope lots at the front setback.
- Encourage diverse front setbacks.

E. **Parking:**

- Encourage homeowners to include additional on-site parking to alleviate problems that will be created by new parking restrictions in their neighborhoods.
- Conduct a comprehensive parking analysis for streets in the fire area.
- Investigate tandem parking for areas with steep lots and limited parking.

F. **Construction Phase:**

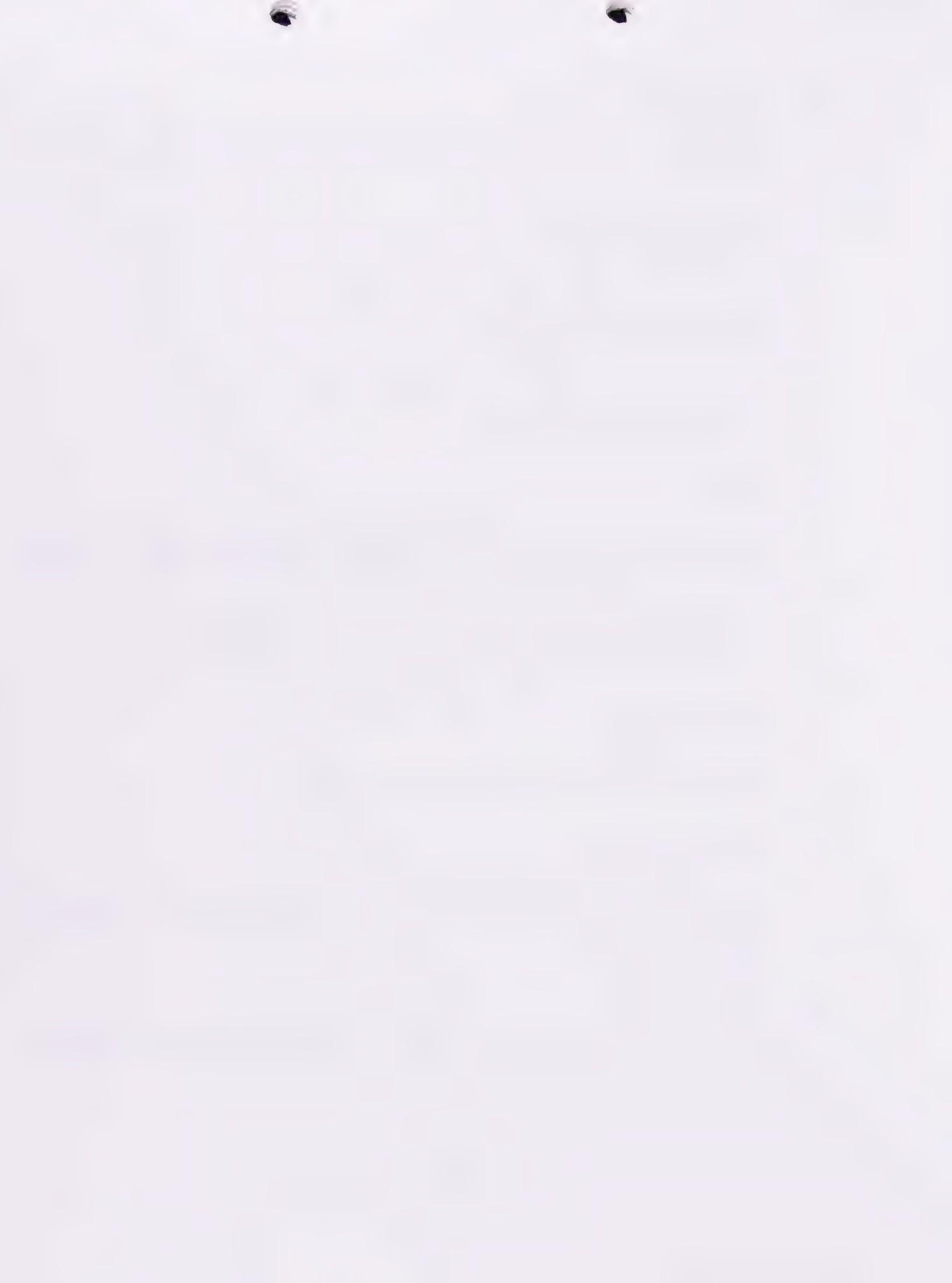
- Develop a plan to coordinate construction activities.

G. **Additional Resources:**

- Create a model of the entire fire area to demonstrate the design and progress of housing development.

H. **Permit Processing:**

- Exempt homeowners seeking to rebuild the "same size" structure from design review.
- Ensure that permits will be processed expeditiously.

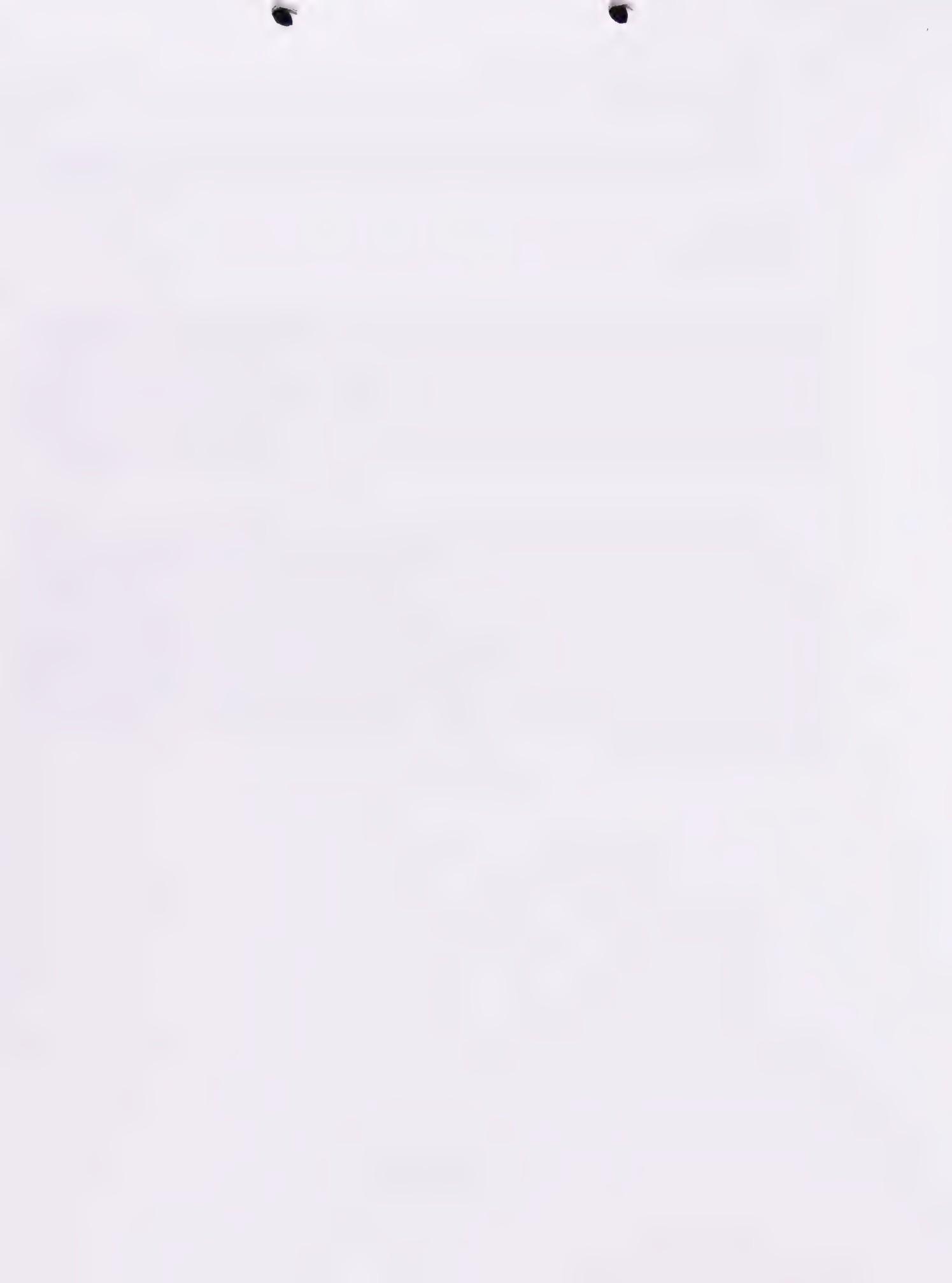


- In developing a new permitting process, do not differentiate between current owners and new residents.
- Permit applications for Hiller Highlands and the Parkwoods Apartments should be subject to existing regulations for design review, environmental review, and planning.

CONCLUSION:

On February 5, 1991, the Task Force on Emergency Planning and Community Restoration will present its final recommendations to a joint working session of the Oakland and Berkeley City Councils. These citizen recommendations will serve to inform the Council-members as they debate policy issues relative to the immediate reconstruction of the fire area and as they deliberate long-range planning solutions to the problems identified by the Task Force. Following this presentation, City staff will respond to each of the recommendations and provide a written report for City Council review in early March.

This report of the Task Force on Emergency Preparedness and Community Restoration is a reflection of the hard work, energy, and dedication of a broad cross-section of our community in response to an unprecedented planning challenge. Over 150 participants, some of whom lost their homes in the October 20th fire, have made an important contribution to the difficult decision-making process which confronts both Berkeley and Oakland as the Cities work to reconstruct the damaged neighborhoods, mitigate against future wildland fires, and improve emergency response systems. Once again, this process of community participation has confirmed that the Cities of Oakland and Berkeley must draw upon the special resources and creative energy of their citizenry to rebuild, restore, and plan for the future.



Mayors' Task Force on Emergency Preparedness
and Community Restoration

EMERGENCY PREPAREDNESS COMMITTEE

COMMITTEE RECOMMENDATIONS:

A. INCIDENT COMMAND SYSTEMS

Background:

1. DESCRIPTION OF ICS. The Incident Command System is an all-encompassing system in which all who arrive in response to an incident crisis know how to operate in regard to entering and performing within the system. ICS incorporates span of control and chain of command management theories, and accounts for inter-jurisdictional and multi-agency cooperation when necessary.
2. DESCRIPTION OF EOC. The Emergency Operations Center is a site manned by the sheriff in which representatives from all appropriate departments are on call. The Oakland EOC is based at Fire Station One and all departments (including Public Works, Police, Fire, and all others) are trained to send resource personnel in the event of an emergency.

Recommendations:

- Increase the regularity of ICS use so that it is practiced even in small emergencies (as small as four car freeway pileups) in order to increase familiarity with the ICS terminology and vocabulary. Prioritization: 6 months.
- Expand the practice of ICS to include regular use by all levels of all city and county government departments, especially by non-uniformed personnel not normally accustomed to such command structures. Prioritization: 6 months.
- Identify and establish a chain of command in all city and county government departments such that the second and third in command of all departments are familiar with ICS roles, in preparation for the event that a department head is unavailable during an emergency. Prioritization: 6 months.



- Increase the number of ICS drills.
 - a. Expand ICS drills to include participants from all city and county government departments to prepare for and practice multi-agency response.
 - b. Annual EBMUD ICS drills with Oakland should be expanded to include participants from all departments. Prioritization: 2 years.

B. PLANNING FOR INFRASTRUCTURE

Recommendations:

- Tailor CORE evacuation planning to a street and neighborhood level, encouraging community committees to plan for shelter, communication, medical, search and rescue, and evacuation requirements in the possible absence of City services. Prioritization: 6 months for the area burnt on 10/20/91; 2 years for non-burnt area.
- Expand CORE evacuation planning to account for the needs of bilingual and handicapped populations, and for the needs of those temporarily disabled by illness or injury. Prioritization: 6 months.
- Expand C.O.R.E. (Citizens of Oakland Responding to Emergencies) training as necessary to reach out to all members of the community through developing and distributing pamphlets and other information. Prioritization: 6 months.
- Develop and implement incentives for long-term participation in CORE to include outreach to new members of the community with the following objectives:
 - a. to encourage neighborhood cooperation thorough introducing neighbors to one another and increasing trust and comradery through block parties and barbecues.
 - b. to regularly review emergency preparedness plans.
 - c. to raise funds for various neighborhood emergency preparedness resource requirements. Prioritization: 2 years.
- Coordinate CORE training with PTAs, church groups, Phoenix associations and other voluntary community organizations. Prioritization: 6 months.



C. PUBLIC HEARING

Recommendation:

- The Cities should conduct a public hearing to solicit information from homeowners and other witnesses regarding their experiences with the October 20th firefighting response. Such a hearing should be designed to develop consensus on the need for an assessment district, what should be done to augment urban-wildland interface firefighting capability, and should include consideration of what programs an assessment district should fund. Prioritization: 1 month.

D. AERIAL SUPPORT

Background:

Research suggests that local base commanders already have the authority to make emergency response decisions (e.g., authorization of use of equipment for firefighting) on the scene, without special approval from above. However, such decisions would be expedited in and facilitated by parallel structure familiarity--e.g., if top local officials are familiar with the local base commanders and if fire and police chiefs and other civilian emergency response personnel are similarly familiar with individuals of corresponding military rank or position. A short-term solution would be to encourage such parallel structure familiarity. This short-term solution would facilitate action on the longer-term need to formalize the emergency response roles of military personnel; if the civilian emergency response roles are written into the military job descriptions, the need to continually reacquaint new military personnel with civilian emergency response procedures would be reduced.

Recommendations:

- Encourage parallel structure familiarity; coordinate such that top local officials are familiar with the local base commanders and that fire and police chiefs and other civilian emergency response personnel are similarly familiar with individuals of corresponding military rank or position. Prioritization: 2 years.
- Formalize the emergency response roles of military personnel by writing the civilian emergency response roles into the military job descriptions to reduce the need to continually reacquaint new military personnel with civilian emergency response procedures, with consideration of the firefighting capability of various military aircraft. Prioritization: 2 years.
- Obtain the memoranda distributed to various state agencies which specifies what National Guard support is available once government agency resources are depleted. Prioritization: 1 month.



- Determine under what conditions aerial support is useful, with particular attention to the problems created by Diablo wind conditions; develop and implement those operating procedures necessary to provide an expedited aerial response to the East Bay area, especially during high fire-risk conditions. Prioritization: 6 months.
- Determine the availability and/or willingness of private vendors as well as State and County resources to provide on call emergency aerial support. Prioritization: 6 months.
- Encourage the state to purchase the CL215 'Super Scooper' and to coordinate with Los Angeles in regard to its use. Prioritization: 6 months [committee support was not unanimous].

E. TERRAIN FAMILIARITY

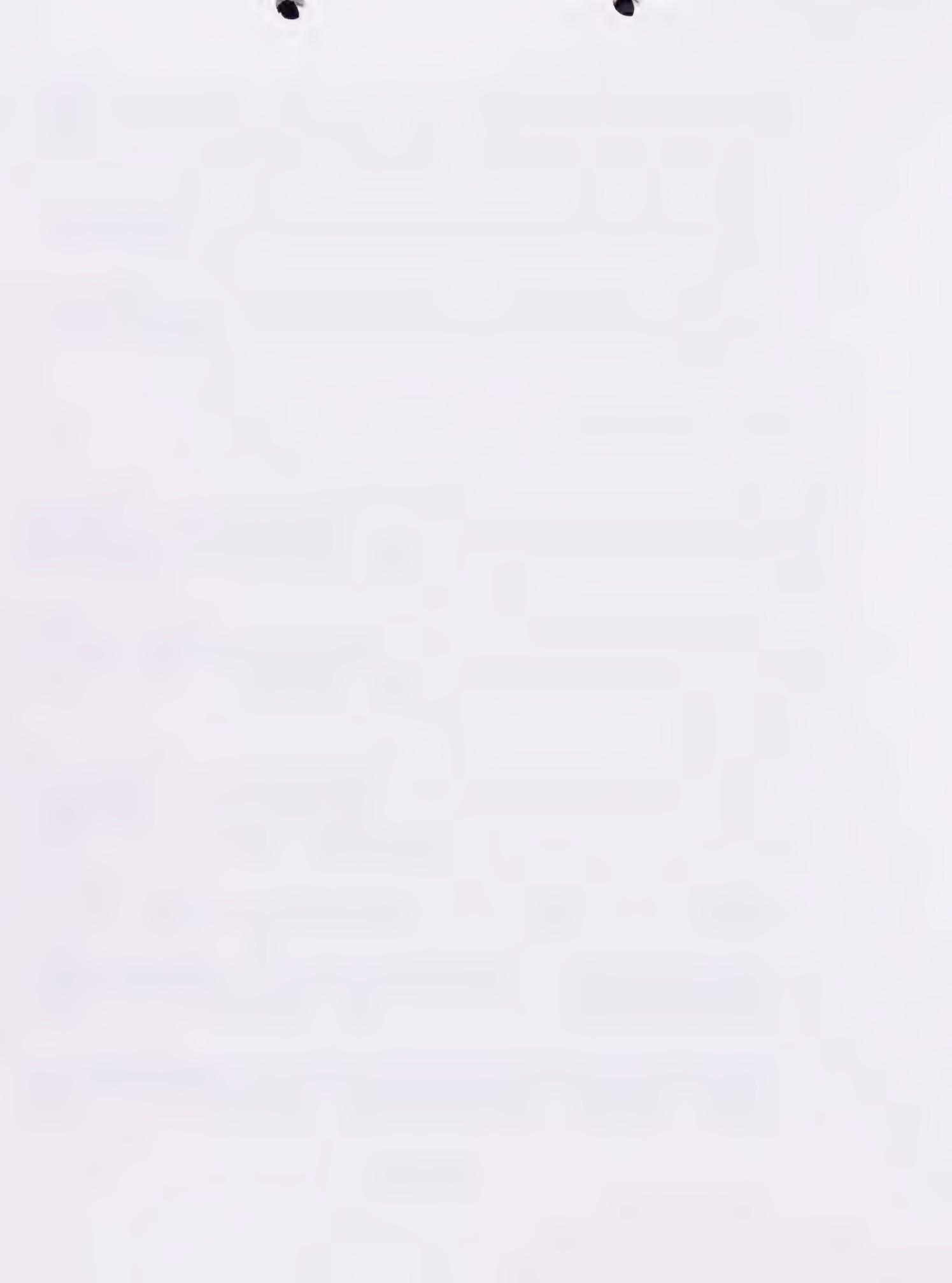
Background:

CDF COMPUTER SYSTEM. The California Department of Forestry Geographic Information System (GIS) computer system presently contains information regarding the geography of the streets in the burned area, including data on outlets and egress and ingress routes.

MULTI-JURISDICTIONAL DRILLS are held every two years in Oakland; the federal government requires a drill every three years in regard to four different emergency scenarios (winter storm, hazardous incidents, wildfire, earthquake).

Recommendations:

- Expand the information on file in the California Department of Forestry GIS computer system to include information on the geography (i.e. outlets, ingress/egress routes) of the entire fire-hazard area; currently, information is limited to the geography of the burned area. Prioritization: 2 years.
- Expand firefighter training programs to include training on the operation of the Department of Forestry GIS computer system. Prioritization: 2 years.
- Encourage homeowners to increase the visibility of house numbers; revise building standards requirements to require 6-inch high numerals to identify each house. Prioritization: 6 months.
- Increase the number of multi-jurisdictional drills, with particular emphasis on tabletop exercises so as to avoid excessive financial costs. Prioritization: 6 months.



- Assist and encourage Fire Department chiefs in encouraging coordinated response to emergencies outside a department's jurisdiction, especially with regard to the Oakland and Berkeley Fire Departments in the area of Oakland with Berkeley mailing addresses. Prioritization: 6 months.
- Equip fire hydrants with adapters for converting 3" outlets for use by 2.5" firefighting equipment, so as to accommodate the 2.5" equipment which is the standard outside the Oakland-Berkeley-Emeryville area. Prioritization: 6 months.
- Increase fire department drive-through drills similar to those performed in the Los Angeles area, in which firefighters discuss various emergency scenarios while in the field. Prioritization: 6 months.
- Slowly phase out all non-standard (non-2.5") fire equipment currently used by the Oakland Fire Department.

F. VOLUNTEERS

Recommendations:

- Provide options as to appropriate levels of volunteer participation; reduce liability problems in order to have more individuals serving as volunteers:
 - a. basic response level training through videos and informational pamphlets.
 - b. more intense CORE-type preparation and training.
 - c. volunteer firefighter/certified disaster worker.

Prioritization: 2 years.

- Establish an ordinance in Berkeley for the purpose of bringing individual volunteers under the aegis of a disaster council. Prioritization: 6 months.
- Encourage fire departments to develop procedures for using volunteers in emergency response and to train firefighters per those procedures. Prioritization: 2 years.

G. EARLY WARNING SYSTEMS

Background:

STATE OES COMMUNICATIONS SYSTEM. The state purchased time on an existing satellite system and established a new communications system for use in emergencies so that local jurisdictions can communicate with the state in regard to resource needs.



Unfortunately, funding stops at the county level, and cities must come up with funding to install the system at the city level.

RAW STATIONS. Remote Aerial Weather stations are being installed in Oakland; EBRPD is seeking an informational system with compatible equipment. One RAW station for the Oakland/Berkeley and Hayward/Fremont would be approximately \$18,000 each.

PRESENT EMERGENCY RESPONSE PROCEDURES. Emergency conditions reported by the USGS system presently prompt specific emergency response procedures both in response to winter storm/landslide conditions and also in response to earthquake alerts. Procedures include action by the police and fire departments and by the EDIS [Emergency Digital Information System], a system which communicates the existence of emergency conditions to the community.

Recommendations:

- Fund installation of a system to integrate cities into the new state OES satellite communications system so as to avoid the present need for cities to first contact the County regarding emergency resource requests to the state. Prioritization: 2 years.
- Request that the state Legislature establish the East Bay high fire-risk urban-wildland interface ("E-zone") as a "special study zone", based on the recurrent fire pattern suggested by the EBRPD report on the area's fire history. Prioritization: 6 months.
- Establish critical levels for humidity and wind conditions appropriate for initiating emergency preparedness response procedures; develop procedures for response to red flag warning conditions involving but not limited to the National Weather Service, the USGS system, the EDIS [Emergency Digital Information System], EBS, OASIS and local police and fire departments with consideration of similar procedures already in place for response to winter storm/landslide warning or earthquake conditions; integrate information gathered from the new systems into already existent response procedures. Prioritization: 6 months.
- Develop a localized system emphasizing citizen reporting of red flag conditions for monitoring weather conditions in particularly dangerous locations including: 1) an augmented remote weather forecasting system utilizing National Weather Service software, and 2) encouragement of contact between neighbors through neighborhood associations, and Pacific Bell telephone warning communications system. Prioritization: 6 months.



H. FUNDING

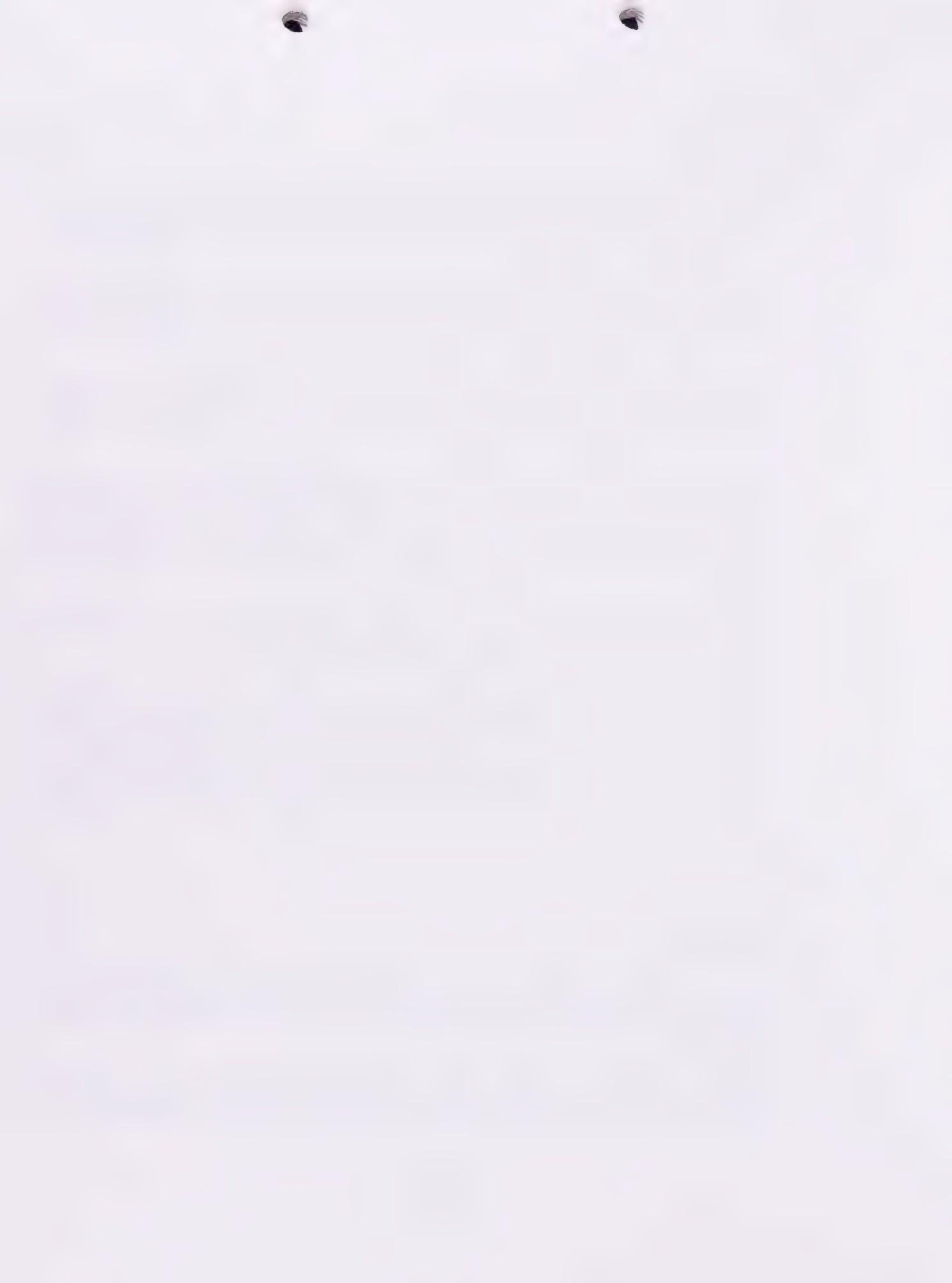
Recommendations:

- Data should be collected to determine how many parcels would be included in a possible assessment district to determine the best boundaries and the best amount to charge per lot. Prioritization: 2 months.
- A fire prevention assessment district should be formed: the district should not be large, but it should be designed to serve as a model to be proposed to other communities for replication. Prioritization: 6 months.
- Citizens groups with input from city staff and experts in regard to costs of various proposals should develop and propose a package of services the assessment district should fund. Prioritization: 6 months.
- Investigate the Fire District Consolidation study presently underway (a study which seems to suggest that if fire stations in unincorporated areas were combined, there would be increased efficiency and better service) in an effort to determine the best form of a fire prevention assessment district for unincorporated areas. Prioritization: 6 months.
- Establish a Joint Powers Agency as proposed by the 1982 Blue Ribbon Fire Prevention Committee of the East Bay Regional Parks District.
- Request funding in the amount of \$500,000 from the FEMA Hazard Mitigation grant to fund the Joint Powers Agency; determine the availability of other funding sources. Prioritization: 6 months. [The Committee proposes that two assessment districts be formed: 1) the Oakland-only proposal presently being developed by Oakland city staff; and, 2) the inter-jurisdictional Joint Powers Agency proposal described above].

I. ANIMAL CARE AND RESCUE

Recommendations:

- Several locations throughout the City of Oakland must be identified prior to an emergency and predesignated as emergency substations following a major disaster. Prioritization: 2 years.
- The City of Oakland should develop a comprehensive multi-hazard Emergency Operations Plan for the Animal Control Department to address preparedness,



response, and recovery activities pertaining to animals/pet care and rescue. Prioritization: 6 months.

- Volunteers interested in performing animal care and rescue following an emergency should participate in the City of Oakland's C.O.R.E. training programs as well as Red Cross training, and training to be offered by the Veterinarian Association. Using the C.O.R.E. and Home Alert System, each block would have an Animal Block Person that would know the neighbors who have animals/pets and those with special needs. Prioritization: 6 months.
- Standardize pet information forms and descriptions including the development of a computerized database for lost and found pet information. Prioritization: 6 months.
- Establish a uniform multi-jurisdictional between cities and counties on the appropriate euthanasia policy for multi-hazard emergency scenarios. Prioritization: 12 months.
- Purchase and store emergency supplies that would be stored at various sites for animal care and rescue (e.g. food, water, medical supplies, knock-down kennels, leashes). Prioritization: 6 months.
- Develop and maintain a trained/untrained volunteer registry/database of persons with animal care and rescue skills/interest that would be available to jurisdictions and community organizations involved in animal/pet emergency response. Prioritization: 6 months.
- Establish a memorandum of understanding with the Red Cross and School District pertaining to persons that would need temporary shelter services and allowing them to bring their pets to the temporary shelter for the first few hours until the animals/pets could be placed in kennels an/or at other animal care facilities set up for emergency response. Prioritization: 12 months.

J. OTHER ISSUES

The Emergency Preparedness Committee recommends the following proposals with the understanding that other committees have also considered the issue-areas which the proposals address:

- Ensure that an adequate water supply is positioned in the hills with adequate backup electrical power for pumps, especially during high fire-risk periods. Prioritization: 6 months.



- Encourage the use of goats to clear vegetation on open lands in the high fire-risk urban-wildland interface, or "E-zone". Prioritization: 6 months.

III. RESPONSE TO THE OAKLAND CITY MANAGER'S PROPOSALS

At its January 22, 1992 meeting the Emergency Preparedness Committee reviewed selected portions of the Oakland City Manager's January 14, 1992 Amendments to the Emergency Order for Fire Reconstruction and Information Regarding Emergency Preparedness in the City of Oakland. Portions reviewed related to proposals for a Fire Suppression District and for a General Obligation Bond.

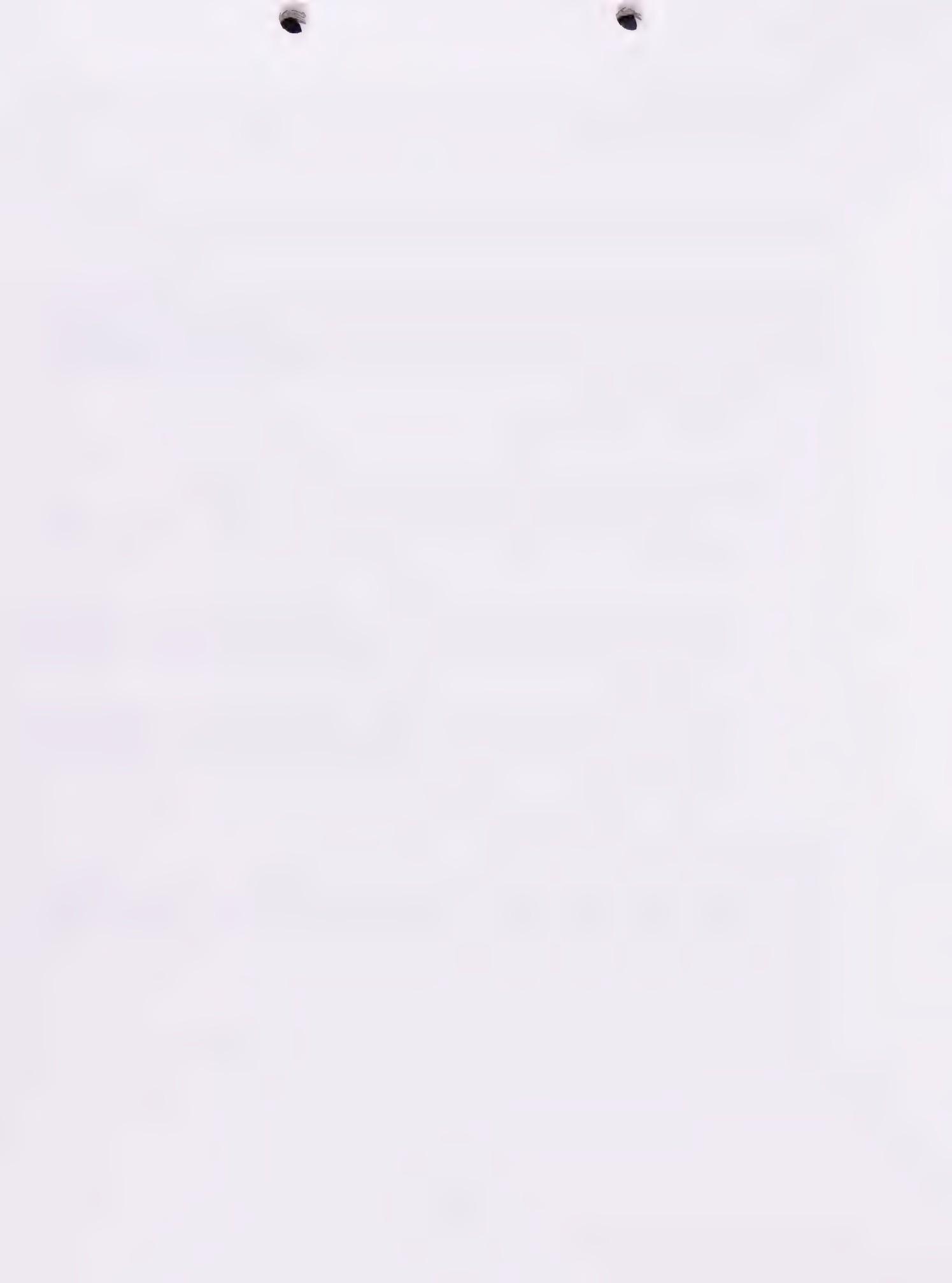
1. Fire Suppression District Proposal

The Committee favors the proposal, with the following recommendations:

- a. Selected areas west of Highway 13 should be included in a fire assessment district.
- b. In regard to determining what areas should be included in a fire suppression district, homeowner association suggestions and proposals should be considered
- c. In regard to determining what programs should be paid for through a fire suppression district, homeowner association suggestions and proposals should be considered.

2. General Obligation Bond Proposal

The Committee favors the proposal for an Emergency Preparedness General Obligation Bond in concept, absent specific information regarding what the Bond would fund and how much those projects would cost.



Mayors' Task Force on Emergency Preparedness
and Community Restoration

COMMUNICATIONS COMMITTEE

BACKGROUND:

During the October 20, 1991 firestorm, a major communications breakdown occurred between and within City departments, neighboring municipalities, regional and state agencies, the media, persons in danger, and the general public. The inadequacy of the communications network created unnecessary chaos and delays in fighting the fire, receiving mutual aid, evacuating residents, and providing timely information to the media and to the general public about the crisis at hand. This communications breakdown resulted from the lack of proper implementation of existing Emergency Preparedness Plans and the inadequacies of outdated communications systems.

In contrast, communication in the days following the firestorm was generally successful. The Oakland and Berkeley governments and their citizens have banded together, creating active communication chains through the disaster relief centers, the one-stop assistance centers, and local neighborhood associations.

GOALS:

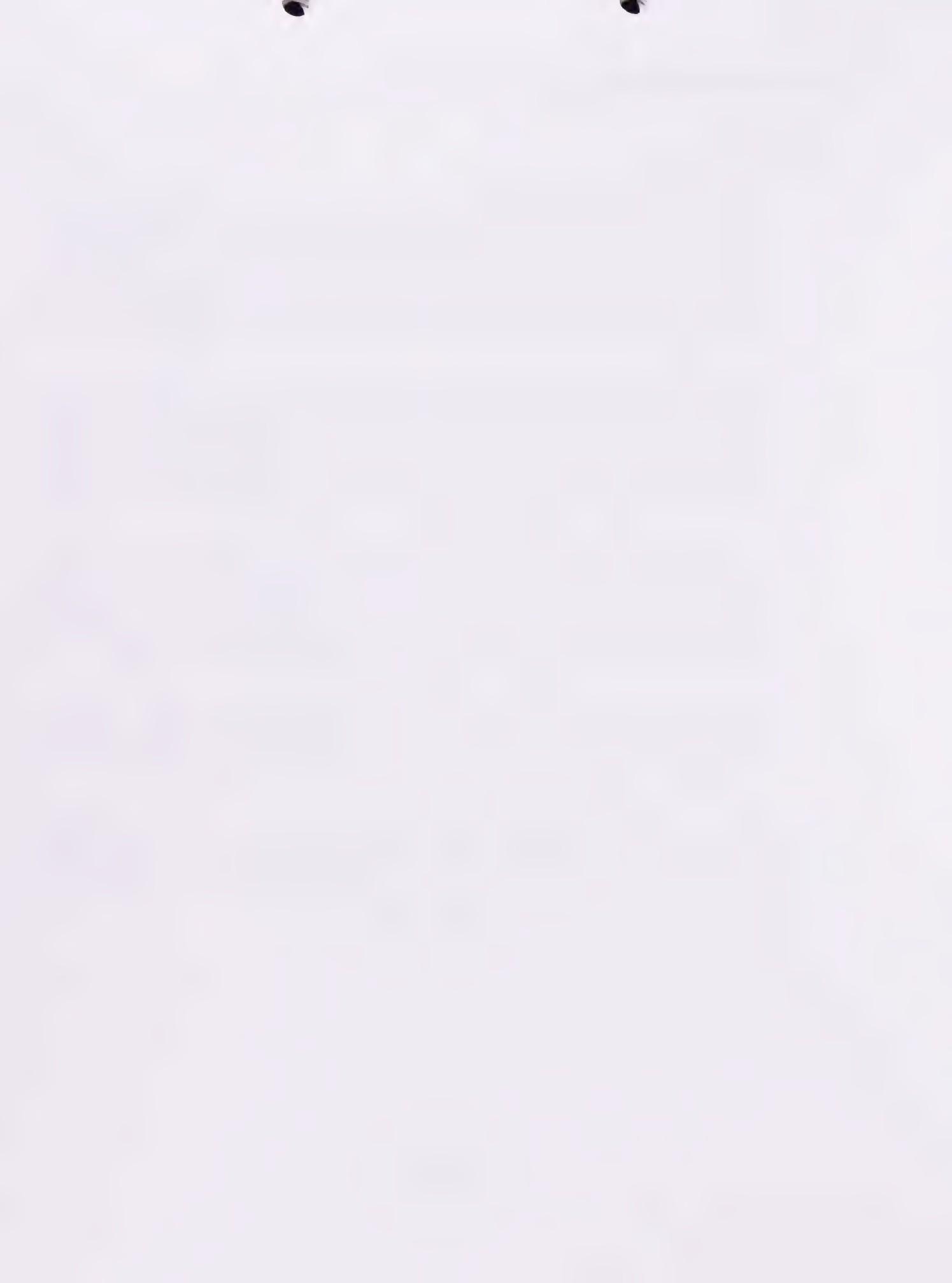
- 1 Ensure that a network of local neighborhood organizations is created and maintained to facilitate communication and self-reliance during an emergency and to maintain emergency preparedness on an on-going basis.
- 2 Ensure that both technical and human emergency communications systems are established and maintained by government.
- 3 Ensure that affected agencies, media, and citizens have timely access to accurate information during an emergency.



COMMITTEE RECOMMENDATIONS:

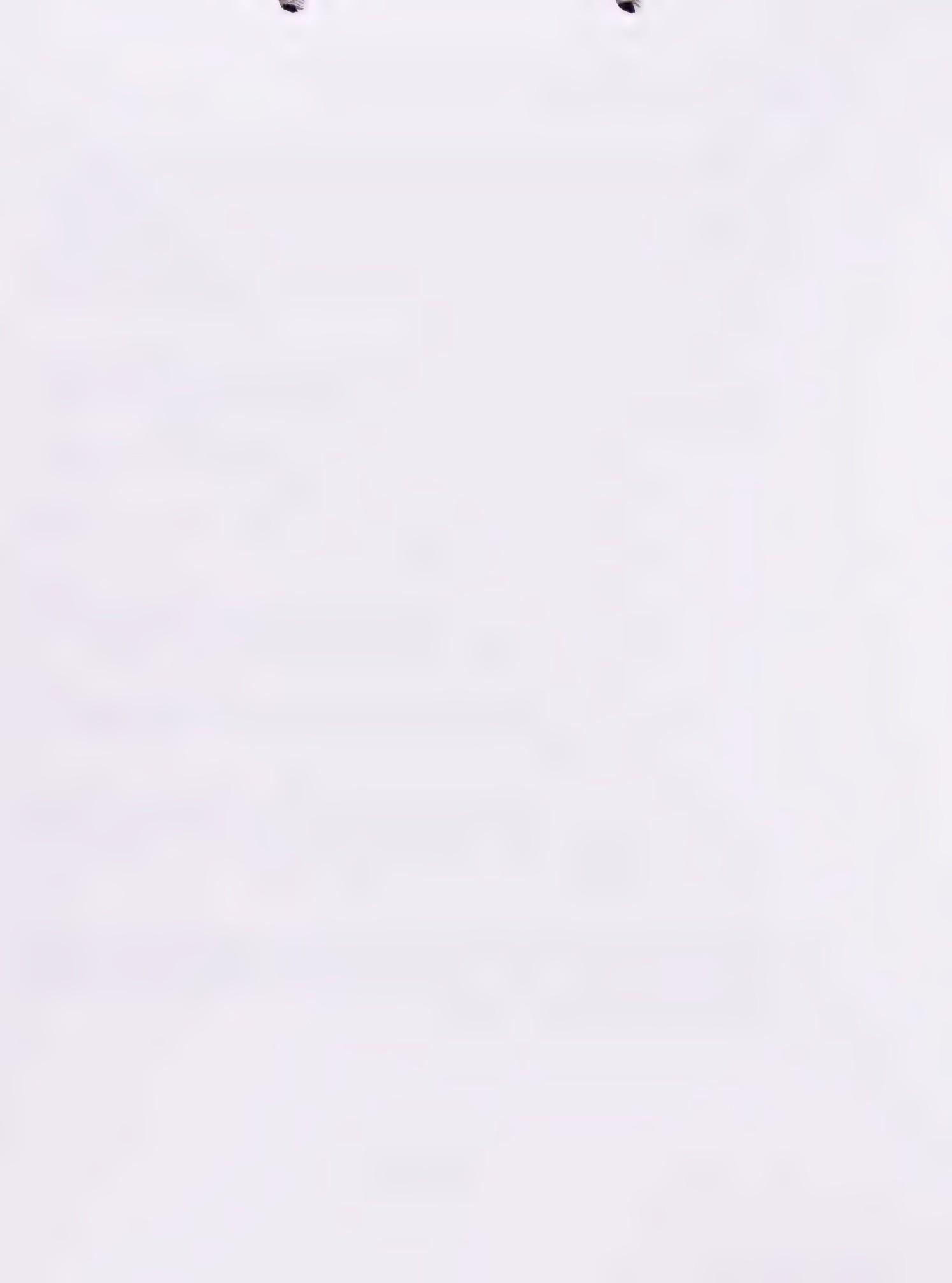
CITIZEN TRAINING:

- Encourage and facilitate neighborhood groups to complete some type of emergency training such as the C.O.R.E. (Citizens of Oakland Respond to Emergencies) program. The Cities also sponsor neighborhood programs such as the Police Department's "Home Alert" and "Neighborhood Watch" programs as well as public information services such as Oakland's "City-Line." These programs should be coordinated so that citizens participating in one program are made aware of other related programs.
- The neighborhood associations, trained through the C.O.R.E. program, can help distribute information from the City and supply volunteers for emergencies. These volunteers can learn how to fight fires, facilitate evacuation, and organize the collection of exit information. The neighborhood organizations can also send information regarding potential evacuation routes to the City to assist with the production of accurate maps (see below).
- To ensure that all residents receive information about city services and emergency preparedness procedures, information could be distributed in tax bills, through landlords when renters sign a lease, and through realtors with the sale of residential property. When someone calls a City office and is put on hold, instead of listening to music, recorded information on emergency preparedness could be played.
- Neighborhood maps should be developed delineating evacuation routes other than streets. Such routes can include fire trails, dry creek beds, public paths, walkways and stairways between streets. Neighborhood organizations can provide available information on escape routes to help produce an accurate map of their area.
- Hill area residents should be educated on the necessity of vegetation management and brush removal to facilitate neighborhood cleanup programs. The Cities should offer free debris removal semi-annually for residents who clear brush from their own property. If a property is not clear to the established standards, the Cities should clear the property and lien the property owner.



EMERGENCY MANAGEMENT STRUCTURE / PLANS:

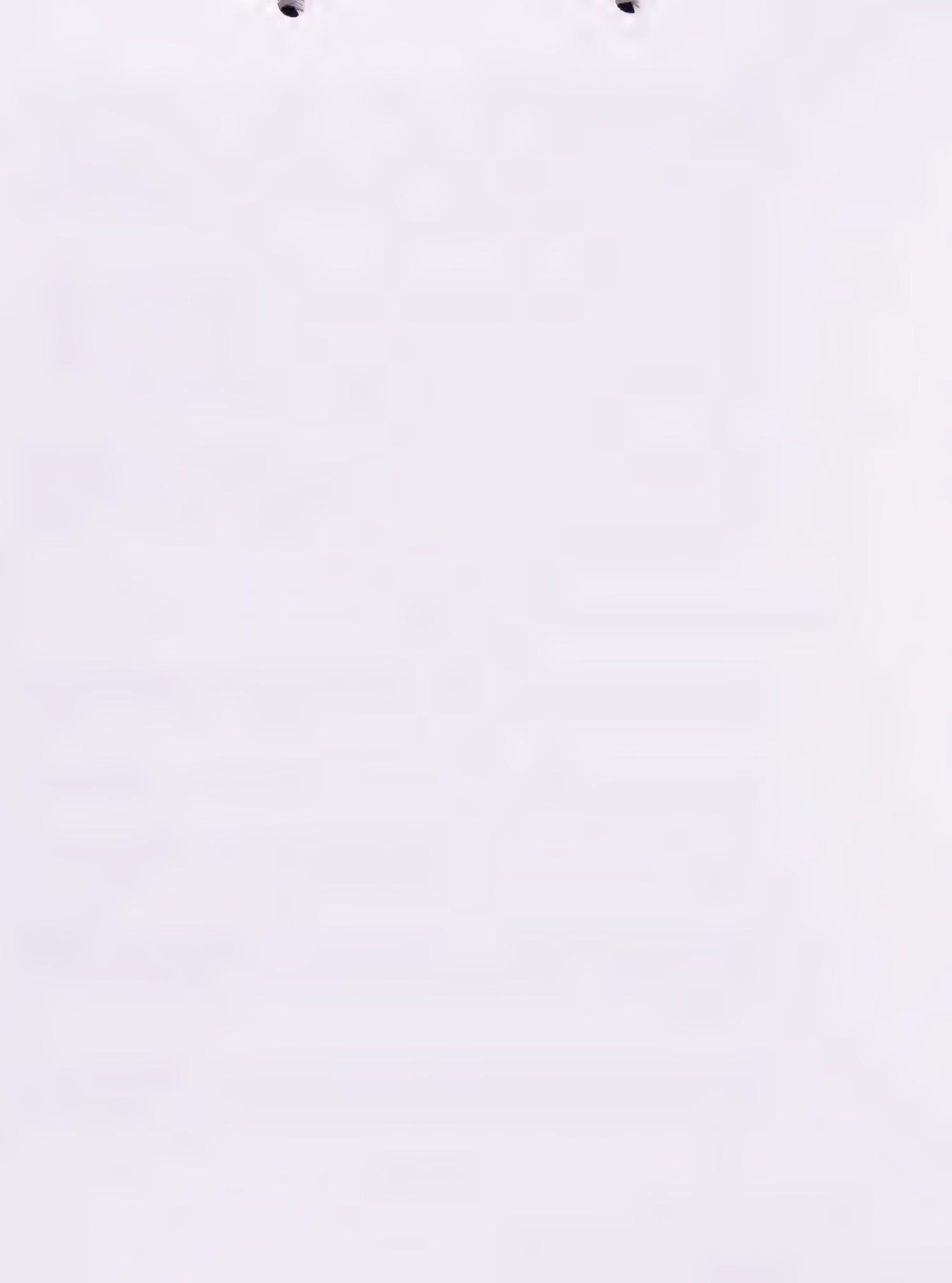
- Establish an appointed Emergency Management Board or Commission (this structure varies for each City. Through Ordinance, Oakland has authorized such a Board which has yet to convene. Berkeley has created a Commission which meets monthly). The Committee encourages this concept to ensure that all types of emergency preparedness activities and projects are identified and prioritized on an on-going basis (annual review). This organizational structure can provide accountability, allow for necessary public input, increase visibility, and serve as a lobby to support City staff in their efforts.
- The Emergency Management Board was adopted by the City of Oakland in July 1990, but has not established its membership or convened the quarterly meetings that are specified in the Ordinance. Therefore, the Committee recommends:
 1. Members be appointed from appropriate outside agencies, the general public, and appropriate City departments.
 2. The first quarterly meeting of the full Emergency Management Board be convened by March, 1992.
 3. In Oakland, all communications projects detailed in this report should be referred to the "Standing Committee for Response" of the Emergency Management Board for immediate implementation.
 4. That the Emergency Management Board or Commission be required to present formal quarterly reports to the City Council beginning July 1, 1992.
 5. That the Emergency Management Board or Commission develop a city-wide emergency preparedness budget beginning fiscal year 1993/94 and that projects recommended by the Task Force be considered for funding during the 1992/93 Budget hearings.
- Empower the Office of Emergency Services with lead responsibility for emergency information during and after an emergency. Emergency Preparedness protocol and training for all City Public Information Officers (PIOs) should be the responsibility of the Office of Emergency Services.



- Establish and maintain neighborhood emergency preparedness plans and multi-level, multi-means communication networks under the direction of a newly-established Neighborhood Liaison Officer. This employee could maintain a database of residents who have completed emergency preparedness training in order to activate these citizens in the event of an emergency. Such a database could also outline which neighborhoods should be targeted for outreach efforts to increase the number of residents trained in emergency preparedness.
- Update, implement and maintain existing Emergency Preparedness Plans including the Public Information Operations Manual on a quarterly basis. This task should be the responsibility of the Emergency Services divisions. (Adequate Emergency Preparedness Plans had been adopted and were available at the time of the October 20th firestorm. However, they were not sufficiently utilized to maximize the benefit they could have supplied during the initial response stages of the disaster).
- Media representatives, a member of the Mayor's staff, and the City's Public Information Officers immediately convene as the Communications Committee of Oakland's Emergency Management Board (and Berkeley's equivalent). Monthly meetings should be convened to enhance and maintain the Emergency Public Information Operations Manual.

IMPROVED COMMUNICATIONS SYSTEMS:

- Complete the installation of Oakland's new 800 MHz Trunk System and ensure radio compatibility with other local municipalities and agencies is established and/or continued.
- Create a protocol to adequately train staff for "911" emergency dispatch operations during and following an emergency.
- Investigate the use of computerized automatic telephone dialing systems to aid in alerting and warning as well as information distribution during an emergency.
- Establish a single, fully maintained and operational Emergency Incident Command Center, perhaps modelled after such centers employed by private industry (i.e. PG&E and AT&T). The Committee suggests that cities and counties explore joint operation of regional facilities to save on the high cost of set-up and maintenance.
- Establish an annual Emergency Preparedness Drill that will include the testing of the public information system and help educate the entire community (include corporations and local businesses). A full-scale exercise including outside agencies



should be conducted annually to test all communications protocol as well as other emergency procedures. (Cities might coordinate with the State's emergency exercise that takes place on April 20th).

- Practice is a key element in ensuring that residents and systems will perform appropriately when an emergency occurs. Therefore the Committee recommends that all communications equipment should be tested monthly and plans/procedures should be tested bi-annually.

PROVIDING INFORMATION TO THE MEDIA AND THE PUBLIC:

- Neighboring cities should deploy compatible technologies (e.g. computers; phone and wire service systems) at the sites chosen as staging areas or shelters in order to collect all information in an organized and useful fashion. In addition, cities must deploy technology that enables information to be rapidly shared across affected sites regardless of city boundaries.
- At each information collection point, trained volunteers (as appropriate) should distribute information deemed reliable. Trained Public Information officers should be available at the emergency command centers and be prepared to talk with residents and the media.
- All information from all sites must be accessible and immediately transferred to the Incident Command Center.
- As required by law, the media should have access to emergency sites in order to accurately provide information to the general public.

COSTS:

- Creating and maintaining an Incident Command Center is very expensive. Therefore, the Committee recommends that the costs of such a center be shared regionally including all East Bay cities and counties. This structure would also guarantee communication compatibility across jurisdictional boundaries, thereby enhancing mutual aid response and communication with the public.
- For the most part, the Committee's recommendations will demand significant new authority and time commitment for a variety of City personnel. The costs associated with conducting routine training and an annual exercise drill must be calculated and added to appropriate City budgets.



- After the October 20th firestorm, it is clear that any proposed decreases to the Emergency Services budgets of both Oakland and Berkeley is not in the best interests of their citizens. In addition, a full-time and dedicated Neighborhood Liaison Officer should be included in the Emergency Services budget. This duties of this position could possibly be added to existing job descriptions.
- Other new incidental costs would include materials, both written and broadcast, as well as the costs of teaching neighborhood seminars in:
 - fighting fires
 - evacuation procedures
 - gathering exit information at shelters
 - organizing neighborhood associations
 - vegetation management
 - first aid

FURTHER CONSIDERATIONS:

- There must be close communication between the Cities' Public Information Officers and the media.
- The "One-Stop Assistance Center" established by both cities after the October 20th fire proved useful and such a one-stop center should be activated after all emergencies. After emergency shelters are closed, the one-stop center can also be used by neighborhoods to distribute information to displaced residents.
- All disaster training and information must be multi-lingual and sensitive to the needs of the handicapped.
- Each City should evaluate how their policies affect other cities in times of emergency. For example, do street barricades block possible evacuation routes for neighboring communities?
- Emergency preparedness plans should include procedures to prevent looting after a neighborhood is evacuated.
- On behalf of residents, each City should act as an advocate with insurance companies, the California Insurance Commission and the Internal Revenue Service. Issues such as how insurance money can be used and valuation of property in claims of uncompensated loss need to be addressed.
- Oakland and Berkeley must be the lead advocate before the California Public Utilities Commission to press for undergrounding utilities. The Berkeley-Oakland

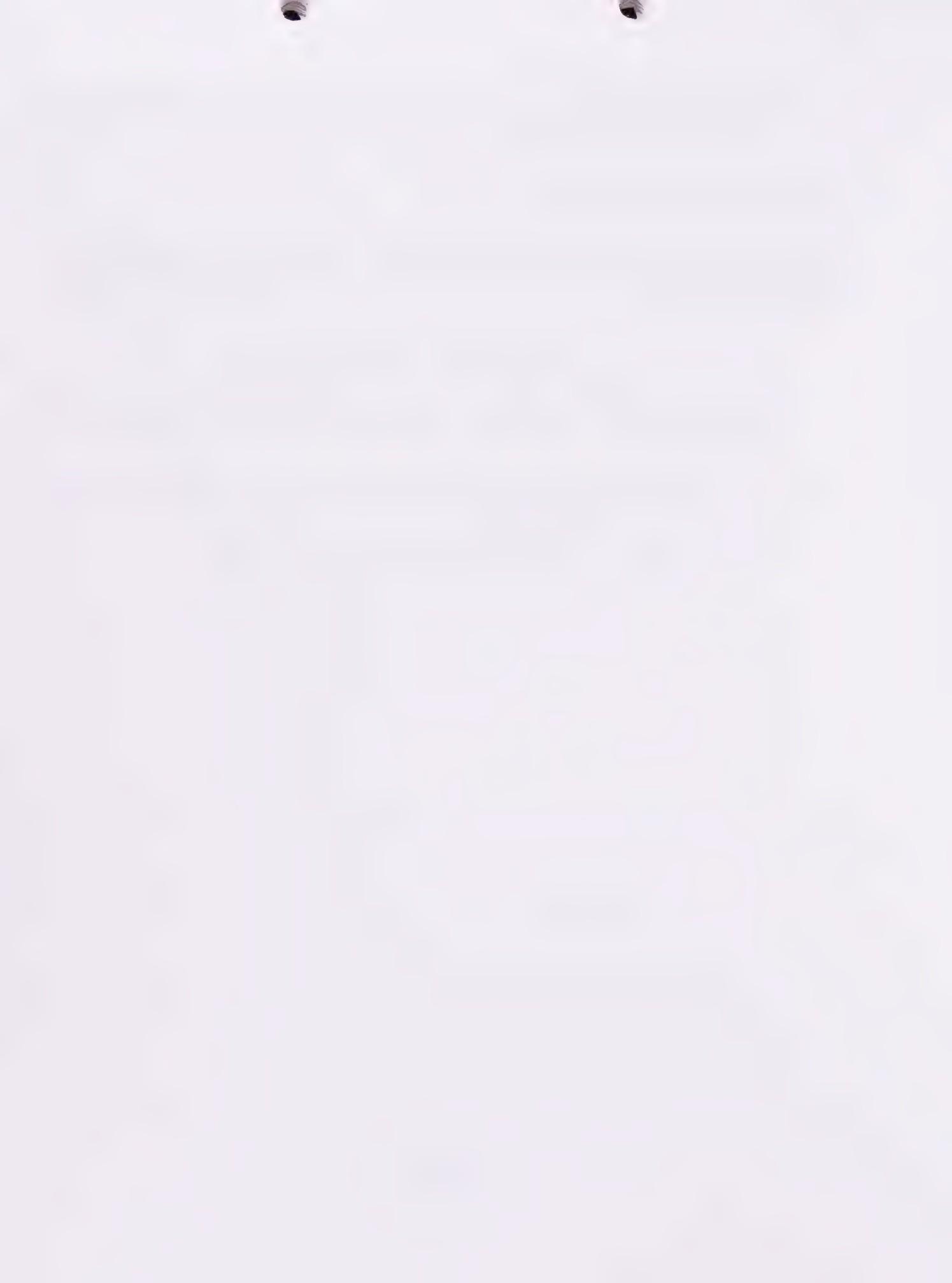


wildland/urban interface is the largest in the country. The hazards of fires started by trees falling on power lines and evacuation routes blocked by live wires can be mitigated by undergrounding utilities.

CONSTRAINTS TO OVERCOME:

The Communications Committee determined that it is important to mention some of the challenges facing both Oakland and Berkeley in implementing an operational Emergency Preparedness System:

- Lack of "buy-in" from City staff, elected officials and citizens.
- Lack of clear authority within City staffs to ensure training, maintenance, and operational protocols. Interdepartmental turf battles could make implementation of any plan difficult.
- Lack of vigilance in updating and maintaining Emergency Preparedness Plans when there is no immediate emergency.
- Lack of funding and other dedicated resources for these purposes.

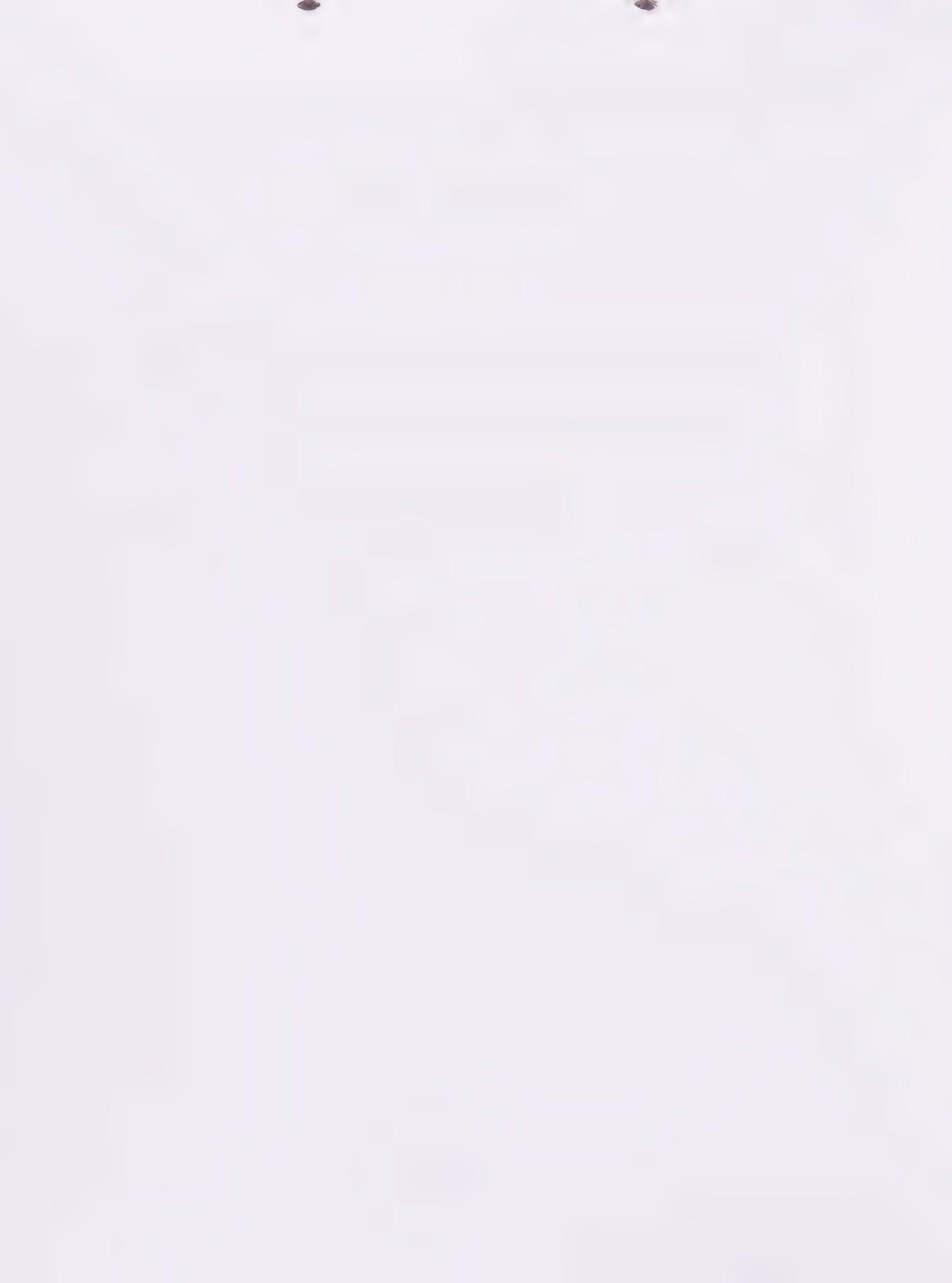


**Mayors' Task Force on Emergency Preparedness
and Community Restoration**

Communications Committee

APPENDIX

1. City of Oakland Emergency Planning Information Manual (is available at the Community Restoration Development Center, 5354 Claremont Avenue)
2. City of Oakland Trunked Radio System Outline (is available at the Community Restoration Development Center, 5354 Claremont Avenue)
3. KCBS List of Six Concerns of Broadcast Media (attached)
4. Comparison of the Emergency Public Information Manuals of Oakland and Berkeley (attached)



KCBS

CBS Radio
A Division of CBS Inc.
One Embarcadero Center
San Francisco California 94111
(415) 765-4000

Recommendations for improving dissemination of emergency information to the public through the media:

- 1) Designate a public information officer whose sole responsibility is getting information to the media quickly and frequently during an emergency. That person must have pre-designated support personnel (perhaps volunteers from other departments) who also can talk to the media and act as a back-up when the primary officer is away. Make sure all PIOs are well-trained.
- 2) Give the public information officers direct and full access to all emergency information from all agencies and the authority to get that information quickly. Place the public information officers at a command post where they can gather information quickly and where they are easily accessible to reporters on the scene and on the phone for live interviews throughout the entire emergency situation. Make sure accredited media personnel are allowed entry to the command post.
- 3) Use the Emergency Digital Information System (EDIS) that provides a direct computer/printer link between public safety offices and major news media outlets. Assign one of the public information officers to responsibility for relaying information directly to the media via EDIS.
- 4) Be prepared to activate the Emergency Broadcast System if necessary. This is coordinated through county offices of emergency services and through the emergency offices of cities with populations greater than 250,000.
- 5) Make sure all public safety officers are familiar with and respect California Penal Code section 409.5. It enables accredited media personnel to cross fire and police lines without delay. Its purpose is to make sure the public quickly gets the information it needs directly from the scene. (409.5 was repeatedly ignored by many Berkeley and Oakland public safety officers without just cause during the fire.)
- 6) Finally, make sure all city and public safety officials understand and recognize the critical importance of the media in getting information to the public. In emergencies such as the fire, information on evacuations, spread of the blaze and advice on use of water and phones can be a matter of life and death. Everyone involved must realize that the only way to get that information to the public quickly and efficiently is through the broadcast media.

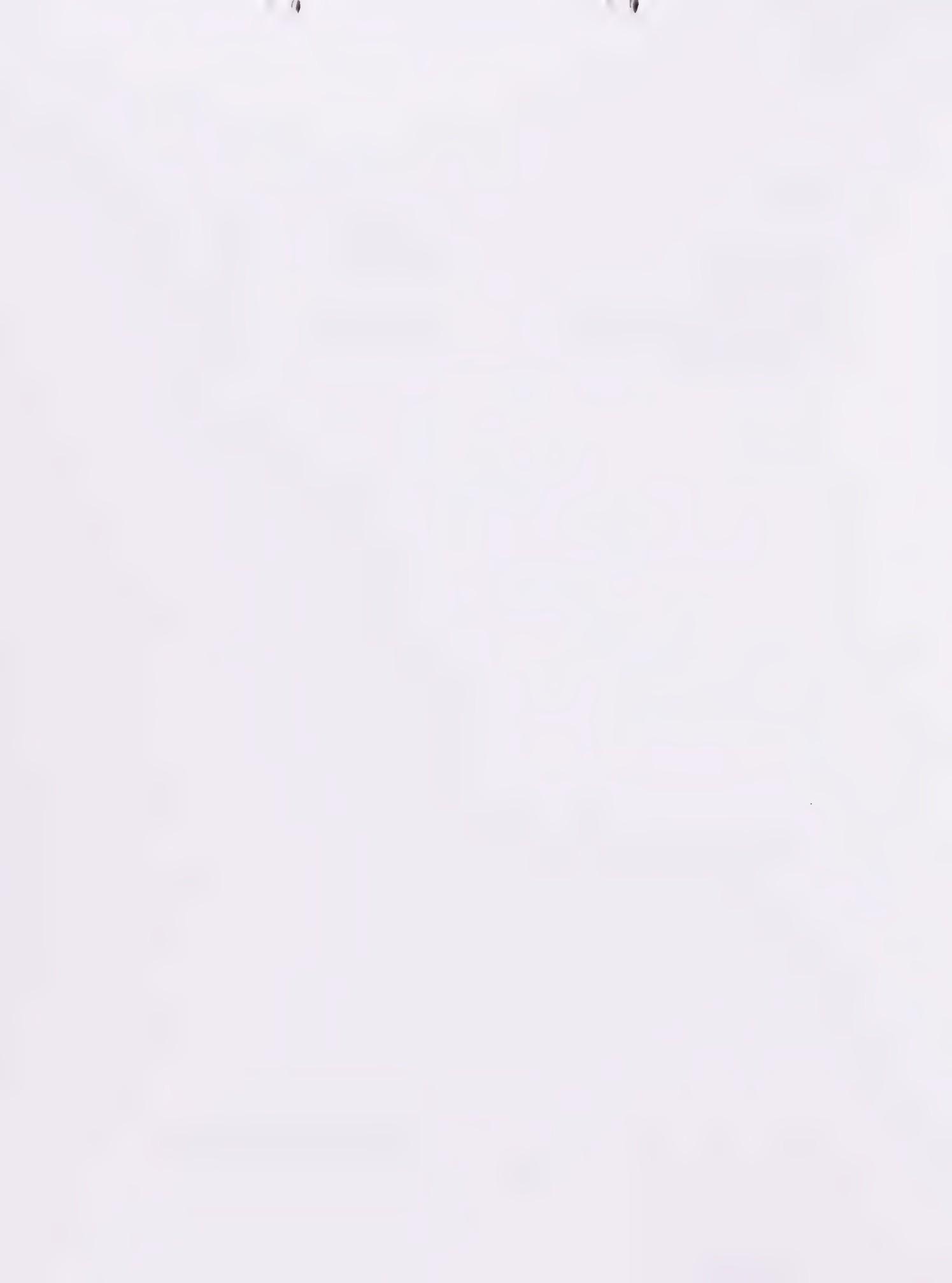
**Comparison of the Emergency Public Information
Manuals for Berkeley and Oakland**

["X" = exists in current Manual]

<u>PIO Operation Manual Section</u>	<u>Berkeley</u>	<u>Oakland</u>
Date	May 1990	No date
Target Groups	-Public -Media -Not listed	-Public -Media -City Employees
PIO System Designated Employees	-No specific # Defined	- 30
Major Areas of Work Assigned to PIO	-Admin. Support Rumor Control/ Emergency Info. -Non-Emergency/ Visitor Control -On Scene Public Information	-Admin. Support Rumor Control/ Emergency Info. -Non-Emergency Information -Field Liaison
Organizational Chart	-Incomplete	X
Staff List	-Incomplete	-May need updating
Emergency/Rumor Control: Responsibilities - Tasks List Responsibilities - Assigned Staff	X -Incomplete	X X
Non-Emergency Information: Responsibilities - Tasks List Responsibilities - Assigned Staff	X -Incomplete	X X
Administrative Support: Responsibilities - Tasks List Responsibilities - Assigned Staff	X -Incomplete	X X
On-Site Public Information: Responsibilities - Tasks List Responsibilities - Assigned Staff	X -Incomplete	X X

Appendices

Sample Radio Messages	-Incomplete	X
Contact Lists	-Incomplete	X
Sample Forms	X	X
Media Access Regulations	X	X
Emergency Broadcast System	-Incomplete	X
FAA Regulations	X	-Incomplete



Mayor's Task Force on Emergency Preparedness and Community Restoration

FORESTRY AND VEGETATION COMMITTEE

I. Introduction

Overview

Graphic television images of exploding Monterey pines and reports of fast flying eucalyptus debris during the recent catastrophic fire have focused public debate on the role of vegetation in spreading fire.

The purpose of this report is to identify how vegetation actually contributed to the recent fire, and to make recommendations to the Oakland and Berkeley City Councils about specific steps that should be taken to reduce the danger from fire and to insure the long term viability of the hills environment.

Fires in this area are inevitable. The challenge is to minimize damage as much as possible. In the Committee's view little progress has been made in managing fire because of a lack of understanding about wildfire; lack of coordination and planning to reduce the danger of wildfire; and lack of enforcement to insure that measures recommended to reduce fire danger are actually implemented.

To address these needs it is recommended that the City Councils focus on three items:

- (1) Education,
- (2) Planning, and
- (3) Regulation.

Significant changes in standard operating procedures will be required to lessen risk from fire, drought, and erosion, and maintain a healthy environment, but without these changes we are increasing our vulnerability to natural forces. Regional and local cooperation is essential for success, and both Councils are urged to take the lead in this regional effort.



Primary Findings

All of the following factors are critical to consider when examining the role of vegetation in fire:

- The most important factor in reducing fire danger from vegetation is not removing specific species, but **regular on-going maintenance**.
- The **high density of flammable structures** contributed significantly to the spread and intensity of the Oakland hills fire. Trees did play a role in spreading the fire, but in many cases the trees caught fire from the houses, not vice versa.
- **Design** is very important; all plants can be rendered more or less flammable, depending on how far apart they are spaced, arranged, kept clear of structures, and irrigated.
- The current emphasis on Blue gum (*Eucalyptus globulus*) and Monterey pine (*Pinus radiata*) as primary culprits in the recent fire, and calls for quick removal of them, are an oversimplification that can lead to negative environmental consequences. Species selection can be important in reducing fire danger, but should not be overstressed.

Finally, the committee found that surface and gully erosion is currently taking place within the burned area, as well as in the rest of the hills. The potential for future erosion and landslides is significant, despite remedial actions taken to date. The committee made several recommendations regarding improvements to the post fire response effort which should be acted upon **immediately**.

Primary Policy Recommendations

- **Implement a long term far-reaching public education program** on vegetation management that is targeted to a wide range of audiences.
- **Develop a coordinated vegetation management plan** for the entire fire hazard area (public and private lands) that addresses safety, beauty and environmental protection.
- **Improve regulation and enforcement of design and maintenance standards.** Design and maintenance standards developed in the vegetation management plan should be enforced by specific City ordinances and regulations. These regulations should be easily understood, and compliance encouraged and enforced in a variety of ways.



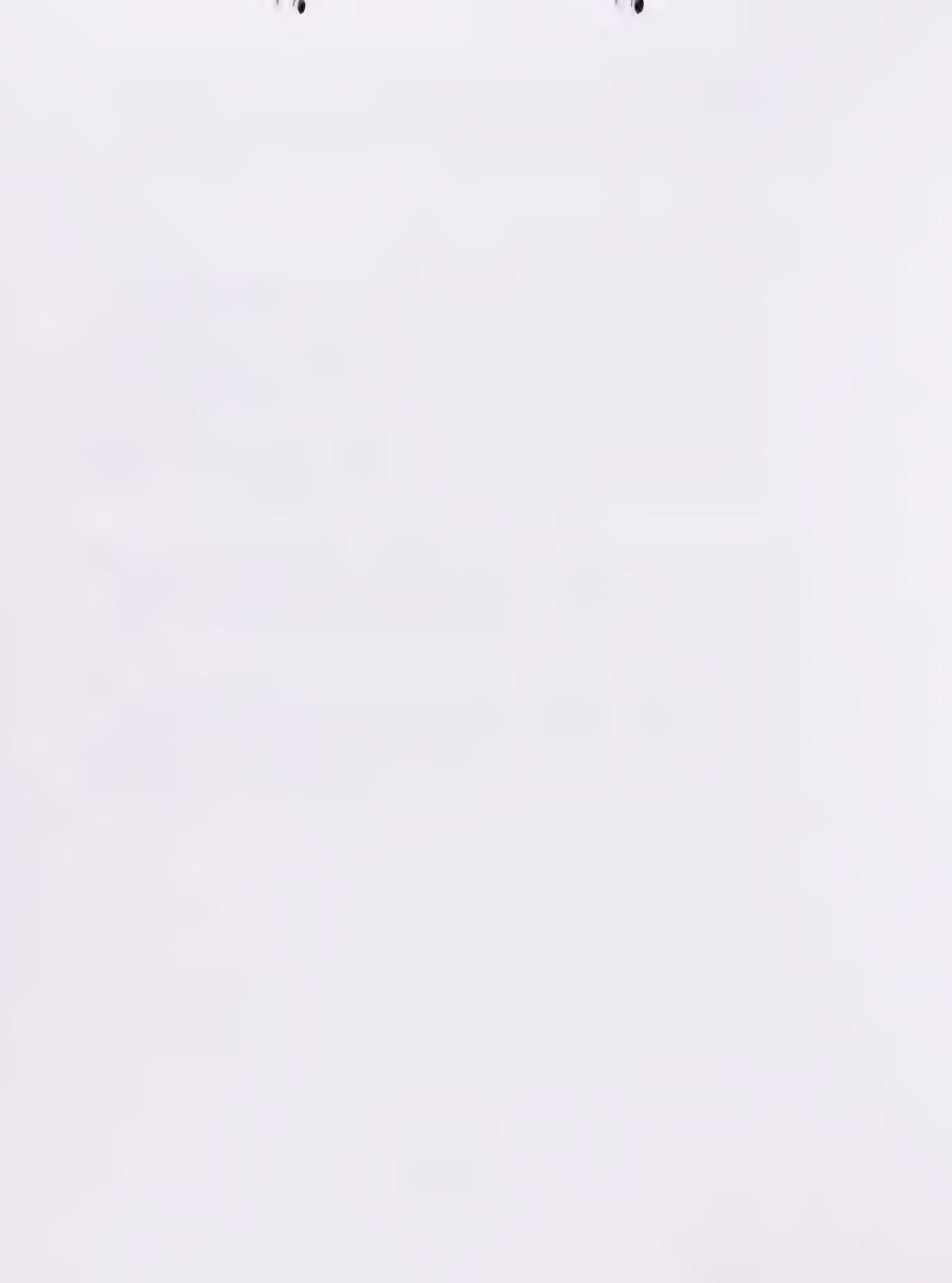
- **Immediately minimize tree removal, grading, and debris removal** in areas of significant erosion or landslide potential until the end of the rainy season. Reinstate a simplified tree removal permit process and inform insurance companies that deadlines for tree and debris removal in areas of landslide potential must wait until mid-April.

Immediate Implementation Recommendations

- **Form a multi-discipline action group** with education, communication and technical expertise to immediately develop a detailed public education plan.
- **Create a technical advisory committee** of representatives of public agencies, professionals, and homeowners to develop a vegetation management plan, and design and maintenance standards that can be easily understood.
- In accord with existing government codes, **establish a Special Fire Assessment District** to promote fire safety and environmental maintenance, and help fund the extra services required in this higher risk environment.

The Committee's recommendations represent an essentially unanimous opinion of the Committee. Participants included experienced fire ecologists, firefighters, foresters, arborists, landscape architects, park naturalists, geologists, writers, editors, and homeowners. A complete list of Committee members is included in the report.

These findings and recommendations are based on the empirical observations of Committee members, extensive research, information from other California municipalities that have survived major fires, and the experience of homeowners and others before, during, and after the fire. The Committee also worked with the American Society of Landscape Architects Fire Task Force and other relevant groups.



II. Vegetation Management

Selecting, designing and maintaining plants is an important responsibility of all homeowners and public agencies. In the past, this responsibility has been largely unregulated, with little educational information or support provided to landowners. Given the important role vegetation plays in the safety and enjoyment of residents, this is clearly an opportune time to begin making vegetation an important priority.

It is essential to link efforts to reduce fire danger with other environmental considerations, including water conservation, erosion control, slope stability, wildlife habitat, recreation, and solid waste management. Without this linkage, some recommendations to reduce fire danger could exacerbate water supply problems, increase the risk of erosion and landslides, add waste disposal problems and eliminate wildlife habitat. It is also important to consider financial impacts and implementation requirements when evaluating potential actions. Solutions to fire management must take into account all these variables.

It is also important to distinguish between individual lot landowners in urbanized areas, and large, institutional landowners of open space and wildlands. Each of the several zones in the hills (urban, wildlands, and urban/wildland mix) have different conditions and require different management techniques. The recommendations in this report recognize the critical differences between zones and separate them where appropriate.

The following findings and recommendations are organized by topic:

A. Education

The single most effective way to achieve greater compliance with appropriate landscaping and vegetation management is education. Education and public outreach programs must be developed if cities in the East Bay are to meet their mandate to provide for public safety and environmental protection.

Findings

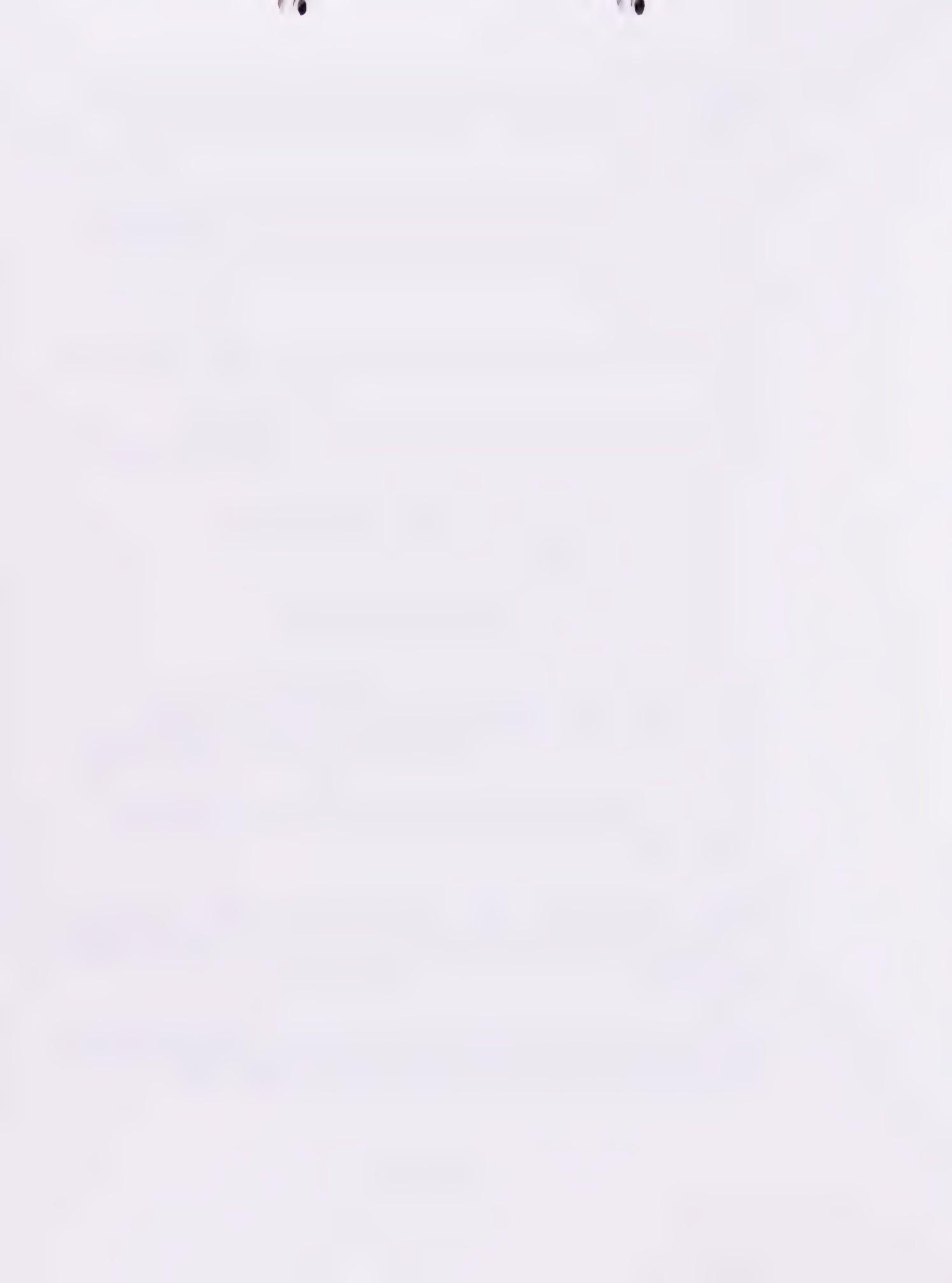
- Education is necessary to modify both public perception and behavior related to urban/wildland fire hazards and vegetative management practices.
- Individual homeowners and the general public have an important role to play in reducing fire hazards. Even if unlimited personnel and funds were available, public agencies and city governments cannot address these problems alone.



- Several groups are currently providing some public education and technical information, but the effort is not coordinated. No central clearinghouse is readily available to the public to coordinate activities and disseminate technical support.
- There are several successful public education programs on other environmental issues that can serve as role models for the development of a comprehensive fire/vegetation program (e.g. EBMUD's water conservation, the CORE earthquake preparedness program).

Policy Recommendations

- Implement a long term far-reaching public education program. The program should:
 - Provide information to a wide range of audiences (homeowners, nurseries, landscape contractors, allied professionals and public agencies.)
 - Use a variety of methods including:
 - written materials (*Design Handbook*, pamphlets, lists etc.)
 - demonstration projects
 - clean-up campaigns
 - design video
 - local radio, TV (e.g. KTOP) and newspaper media
 - educational/interpretive programs
 - Cover the full range of relevant topics, including post-fire recovery, emergency planning and procedures, hazards evaluation, management considerations (such as water conservation, erosion control, freeze resistance, deer resistance), maintenance standards and methods, and landscape design.
- Encourage existing related public education programs to incorporate fire hazard reduction information. Support the programs and efforts of other public agencies.
- Support homeowner associations, neighborhood and grassroots education efforts by providing both enabling policy and technical assistance. Recognize the success of several homeowner association programs, for example projects sponsored by the Phoenix group, and other neighbor based projects such as Crimewatch.
- Encourage homeowner associations to be involved in setting and maintaining standards for vegetation. Provide incentives for common ownership of and responsibility for individual lots of open space in neighborhoods.



Implementation Recommendations

- Form a multi-disciplinary action group with education, communication and technical expertise to immediately develop a detailed public education plan. The plan would outline programs and implementation strategies, and capture the momentum of existing emergency response efforts (such as the Ad hoc Council on Replanting Needs (ACORN); individual volunteers, homeowner groups, local professional organizations and public agencies).
- Assemble a team of experts to develop a *Design Handbook* that would outline landscape design and vegetation management guidelines relevant to different property conditions and plant types specific to the hills. The handbook should be easy to understand and use, and include lists of more or less fire prone plants, along with information about the arrangement and maintenance of plants and their critical role in reducing fire risk. The list should include guidelines for the effective maintenance of different plant species, as well as the role of plants in water conservation, wildlife habitat and slope stability.
- Identify a central location and staff to act as a clearinghouse and to pro-actively distribute information and facilitate local groups' education efforts. Consider the use of the University of California Cooperative Extension for this purpose.
- Actively pursue existing funding sources to develop the education program. Consider sources such as the California Department of Forestry Forest Stewardship Program; local corporations or manufacturers of related products; state and national environmental associations; state level Consumer Affairs Boards; and professional organizations.
- Solicit the local scientific community, industries and professionals to develop and contribute information on reducing fire danger. Encourage their participation in education programs at local nurseries, extension offices, garden clubs etc, where the general public often obtains landscape related information.

B. Planning

Thoughtful, informed planning is essential to unite the numerous public agencies and private landowners in a coordinated effort to reduce fire danger. A comprehensive vegetation management plan will provide the structure and direction for regulations that all can agree to implement.

Policy Recommendations

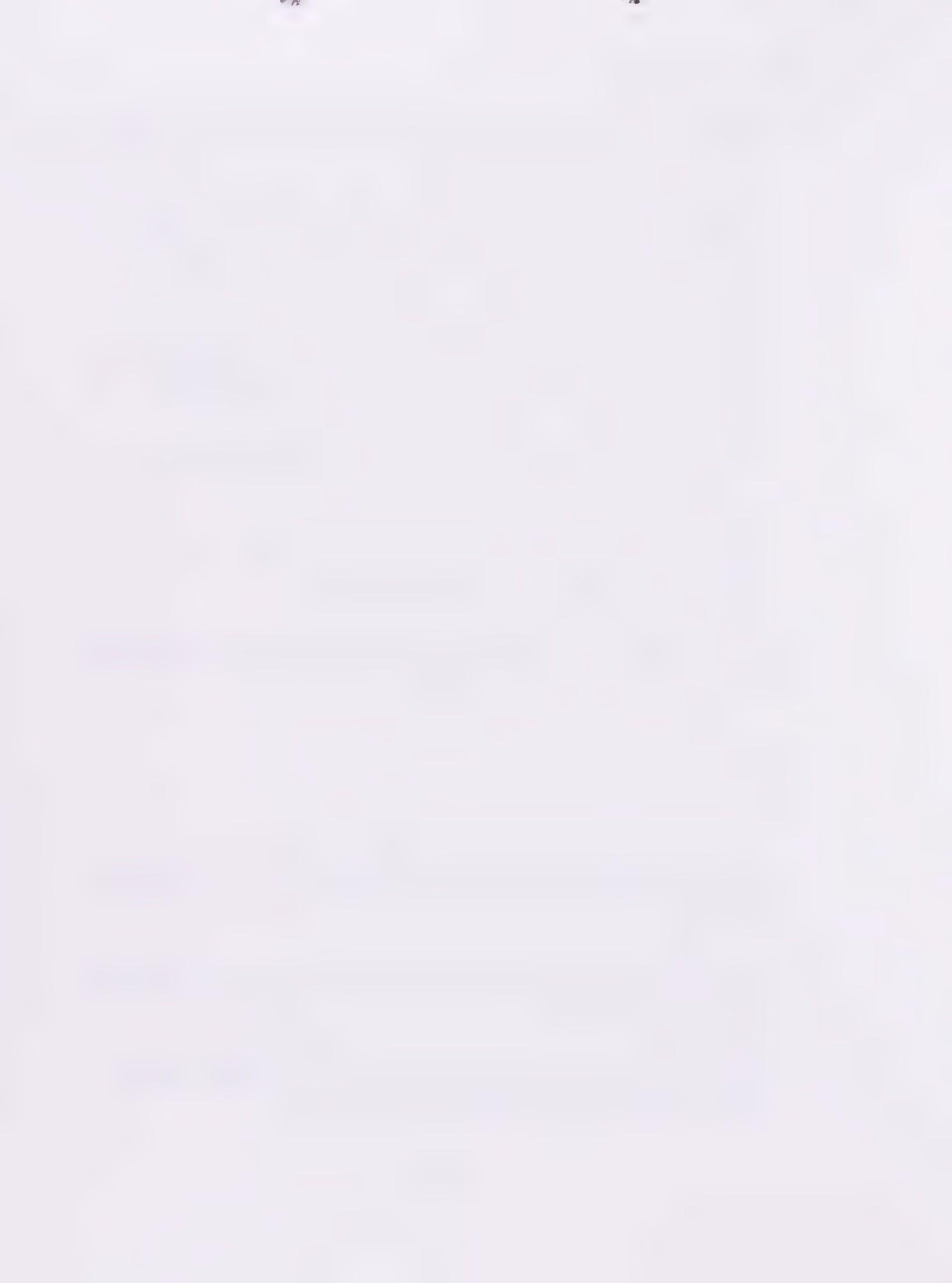
- Develop a clearly illustrated vegetation management plan for all developed and undeveloped land, based on scientific principles and accepted wildfire management practices. The plan should:
 - Consider overall environmental impacts (such as water conservation, air quality, erosion control and landslide prevention, seismic safety, and preservation of plant and wildlife species diversity). Adhere to the California Environmental Quality Act (CEQA) environmental review process;
 - Develop design and maintenance standards that allow for maximum diversity and personal expression in landscape materials and design. A high level of flexibility and sensitivity must be built into the review and enforcement process.
 - Include maps of the developed and undeveloped lands in the hazard zone.
 - Consider creation of fire management zones similar to those developed in other areas of California.
 - Recognize the need for site specific recommendations that take into account specific conditions and landowner needs.

Because the conditions and ownership patterns between urban neighborhoods and public wildlands differs so markedly, additional recommendations and findings for each area have been separated in this section.

Urban Neighborhoods

Findings

- There are a wide variety of landscape designs through which homeowners can create beauty, serenity, privacy and neighborhood character, and at the same time reduce the potential for damaging fire, and be ecologically responsible.
- Some plants are more fire prone than others; however the arrangement and maintenance of plants is a more critical factor in determining fire hazard than are specific species.
- Plant selection and design should take into consideration site specific factors, such as property size, slope, aspect (which way the slope faces), soil and water conditions, and the arrangement of structures.



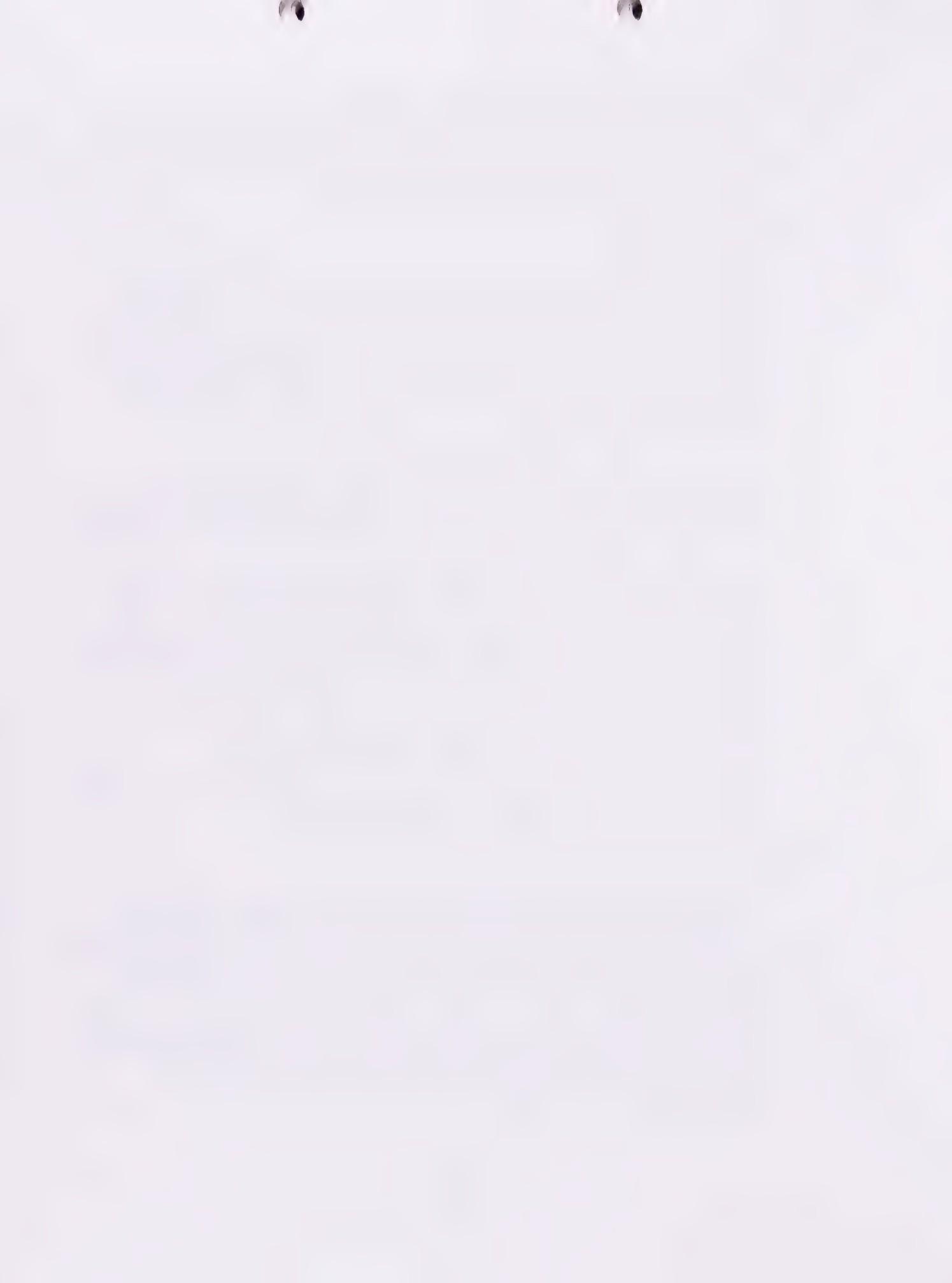
- The danger of fires spotting between wildlands and urban areas can be reduced through the use of fire resistant building materials---especially roofs. Shake or shingle roofs are not only easily ignited by windblown firebrands, but they produce large numbers of firebrands themselves as a structure burns. These firebrands in turn start other fires.

Policy Recommendations

- Develop maintenance standards to be followed by all public agencies and private property owners in designated fire areas. These standards should require shrubbery and fast growing grasses to be regularly cleaned of dead matter, and trees to have dead matter and fuel ladders (undergrowth and lower branches) removed as appropriate. The standards should educate landowners about how to remove dead matter, and how to use debris in mulching, and composting.
- Encourage moisture and water retention in landscaping through drip irrigation systems, mulching, gray water systems, and cisterns for storing rain water. Emphasize mulch and compost as means of increasing soil fertility and water retention, and to protect the watershed and preserve water quality.
- Do not target specific species, such as Blue gum eucalyptus, or Monterey pine, for eradication or exemption from tree regulation policies. Existing stands of pine and eucalyptus must be regularly maintained, and debris processed to substantially reduce susceptibility to fire. Rapid conversion of these stands could cause negative ecological impacts, such as significant soil erosion and possible landslides, and be very costly. Substitute trees should only be phased in gradually if appropriate and cost effective.
- Encourage appropriate species selection with respect to reducing fire danger in replanting and reforestation in the fire burn area.

Implementation Recommendations:

- Create a technical advisory committee to develop a regional vegetation management plan based on sound practices and principles, and to define design and maintenance standards. The committee should also develop short and long range plans to minimize future erosion and landslide problems.
- Rescind Berkeley's eucalyptus eradication policy. This policy is contrary to sound fire prevention practices and could be very costly and environmentally detrimental. It also misleads the public about effective vegetation management for fire protection.



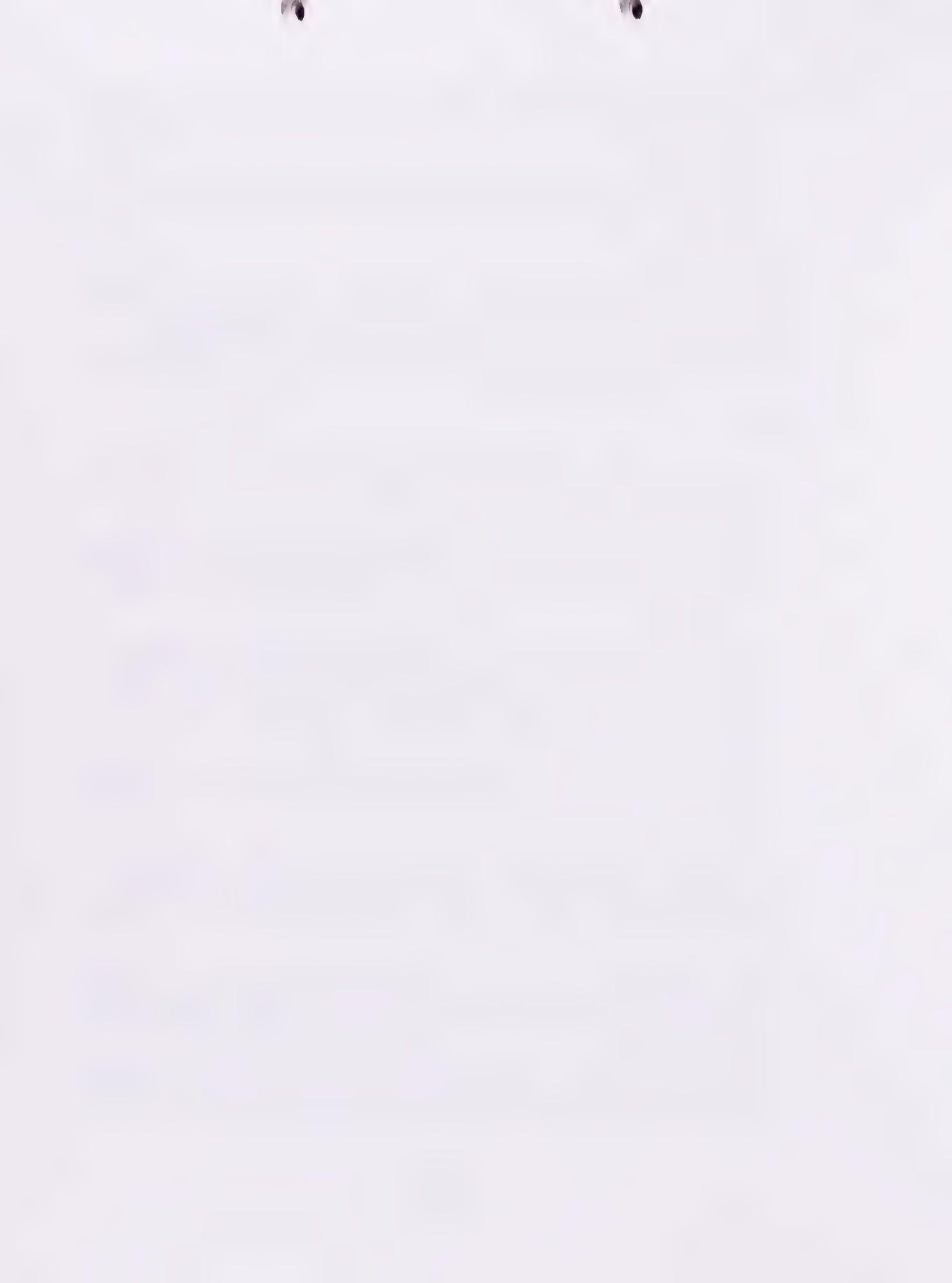
- Improve overall cooperation between the cities and the scientific community. Minimize reliance on a few consultants, and broaden the base of advice on key decisions.
- Provide regular brush removal as well as mulching/composting services to encourage residents to maintain vegetation.

Public Wildlands

Several of the recommendations listed above, such as developing a comprehensive vegetation management plan, apply to public wildlands as well as urban neighborhoods. In addition, there are findings and recommendations specific to public wildlands in the East Bay hills:

Findings

- Numerous variables in fuel, weather and terrain all interact to contribute to the rate of spread and intensity of a wildfire.
- Vegetation management to reduce wildfire danger focuses on reducing *available* fuel. Fuels which are fine, dry, continuous (but not compacted) and plentiful are most available to a wildland fire and contribute to its spread and intensity.
- Wildland fires can endanger urban areas in two ways: rapidly spreading, intense flame fronts, and/or firebrands blown ahead of the main fire that start fires. This is called 'spotting.' In urban/wildland mix areas much spotting is caused by burning materials from structures.
- Fuelbreaks (low available fuel buffer strips) and fire breaks (no fuel strips) help control the spread of flame fronts, but are often ineffective in that fire can "jump" these breaks.
- Particular tree species do not pose a significant fire danger when properly maintained. The selection, arrangement and maintenance of vegetation around a structure to reduce available fuel is also important in reducing the danger of spot fires.
- Some stands and species of trees in the fire area have created litter and not been adequately maintained to insure fire safety. A greater effort by public and private property owners is needed and should be encouraged.
- Broad area treatments, such as prescribed burning, are effective in reducing the build-up of surface and ladder fuels in wildlands. The periodic reduction



of these fuels greatly reduces the chance that a wildland fire will become intense enough to burn the crowns of trees and cause long distance spotting.

Recommendations

- Evaluate and implement fuel management alternatives based on effectiveness in reducing fire danger, and on environmental impacts, financial costs, and implementation requirements.
- Create fuel breaks on undeveloped land along the urban-wildland interface to reduce the spread of fire, and to serve as a base against which to anchor other broad area treatments; with the understanding however, that fuel breaks can be almost completely ineffective in extreme fire conditions.
- Use broad area treatments such as prescribed burning to reduce the build-up of surface fuels and undergrowth.
- Create a Joint Powers agreement to coordinate fuel management objectives and treatments between the numerous jurisdictions that have authority over public wildlands.
- Require either the Cities or the Fire Assessment District to periodically monitor wildland areas to insure that effective maintenance is carried out.

C. Regulations

Education and planning are effective ways to encourage compliance with landscape and vegetation guidelines, but regulations and enforcement are still needed to insure actual change. There are existing laws that can be adapted or augmented to increase fire prevention and protection activities. The committee is recommending additional ordinances and code changes in order to maintain an environment that reduces fire hazards on both private and public properties. This can only be accomplished through a combination of incentives and penalties with active enforcement and education.

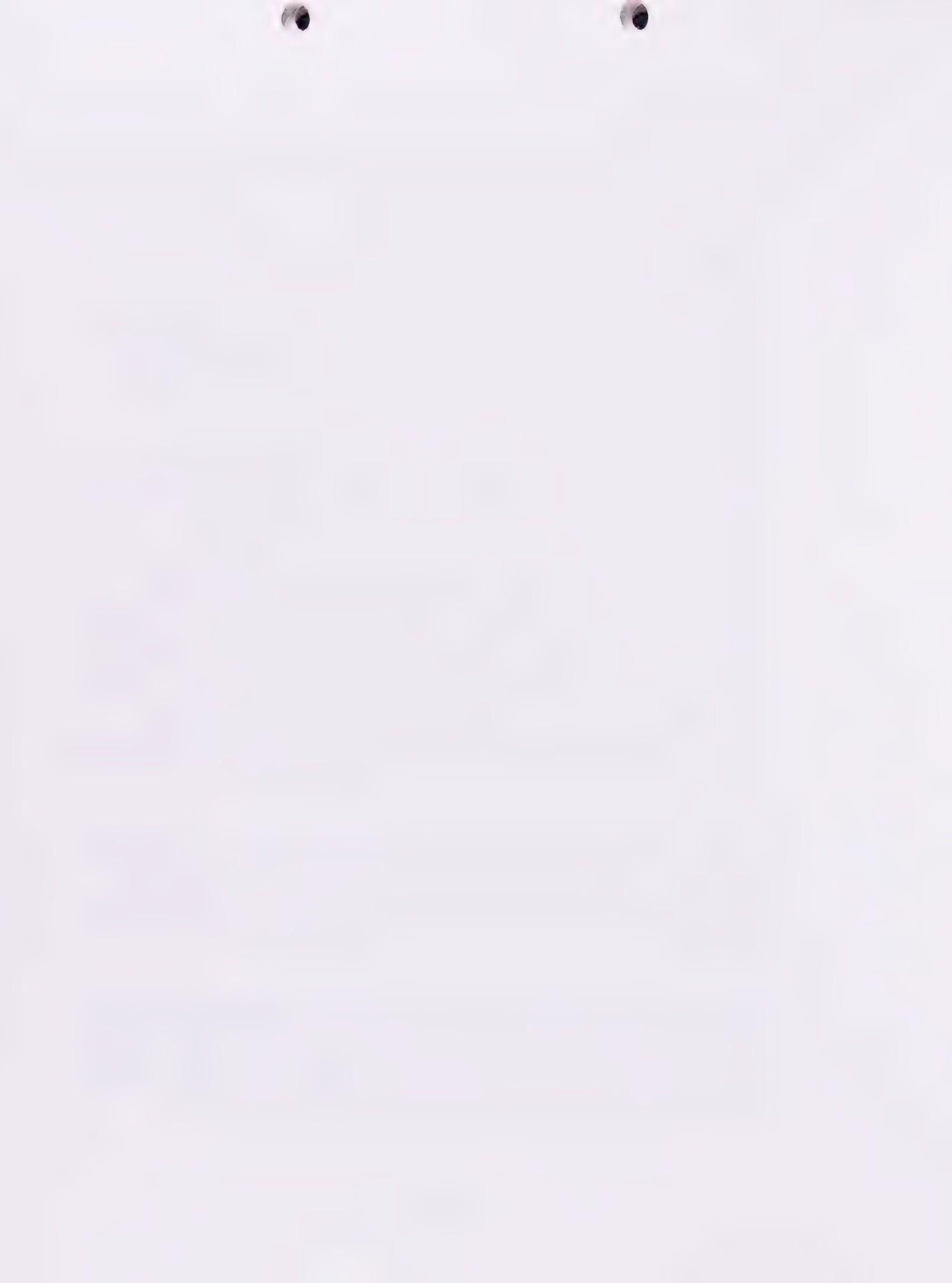
Findings

- Currently, neither Oakland or Berkeley has a regular program that promotes or enforces fire safety practices.
- Existing codes that might be used to regulate vegetation are inadequate and insufficiently enforced. (For example, P.R.C. Section 4291 has apparently not been adopted by the cities, and therefore is not City policy.)



Recommendations

- Investigate the North Oakland Hills Area Specific Plan Zone S-11 (site development and landscaping) regulations as a possible model ordinance for the entire Oakland/Berkeley fire hazard area.
- Designate a lead department in each City to be responsible for all enforcement mechanisms relating to vegetation management.
- Implement city codes that would require all homeowners to submit a landscape plan and ongoing maintenance plan as part of the building permit process. Insure that the code is easy to understand, supported by clear educational materials, and that review and approval is done by qualified experts in a 'user friendly' process.
- Require annual inspections of all property in fire hazard areas to insure compliance with vegetation management codes. Inspections would be based on specific site conditions, design and maintenance standards developed in the vegetation management plan, and would be clearly defined.
- Require a reasonable area, adequate to the site, around each home or structure to have plants that are selected, arranged, and maintained to minimize fire hazard, as well as take into consideration other environmental factors such as water conservation, wildlife habitat, slope stability and plant diversity. Emphasize that this does not necessarily mean a loss of privacy and aesthetics, but can be achieved in a way that preserves beauty, privacy and variety. Those homeowners wishing to retain more vegetation close to their homes must assume a higher level of maintenance to reduce fire hazard. (Information about how to landscape in this way would be available in the *Design Handbook*, which should be readily available to all homeowners.)
- Develop a mandatory home inspection program (city wide) at the time of sale to insure that the home and associated environment meets city fire safety codes. The cost of these inspections would be borne by the home seller and must be completed by authorized fire safety professionals or fire department officials prior to the close of escrow (similar to termite inspections.)
- Establish a Fire Prevention Assessment District that covers the entire East Bay hills from Richmond to San Leandro. This recognizes the fact that fire is a regional problem and must be addressed on a regional scale. Present a plan for implementation of the Assessment District and real estate transfer tax plan (see the Funding section) using joint powers agreements.



- Use the Assessment District to stimulate the formation of community based associations that could serve as vehicles for implementing many of the above policies. This approach would place more responsibility on homeowners, encourage community cohesiveness and reduce costs. It might have the additional effect of reducing crime and promoting community harmony.
- Investigate the use of positive incentives to encourage compliance, such as using funds from the Fire Prevention District and/or the real estate transfer tax to advertise applicable insurance discounts for maintaining fire safe environments; and developing a program of community group (block) rebates from the Fire Assessment District for maintaining community fire safe areas. These rebates could be used for additional fire protection or community improvement activities or received by individual homeowners, depending on the decision of the group.
- Initiate a periodic, independent review of the performance of the Fire Prevention Assessment District.

D. Funding

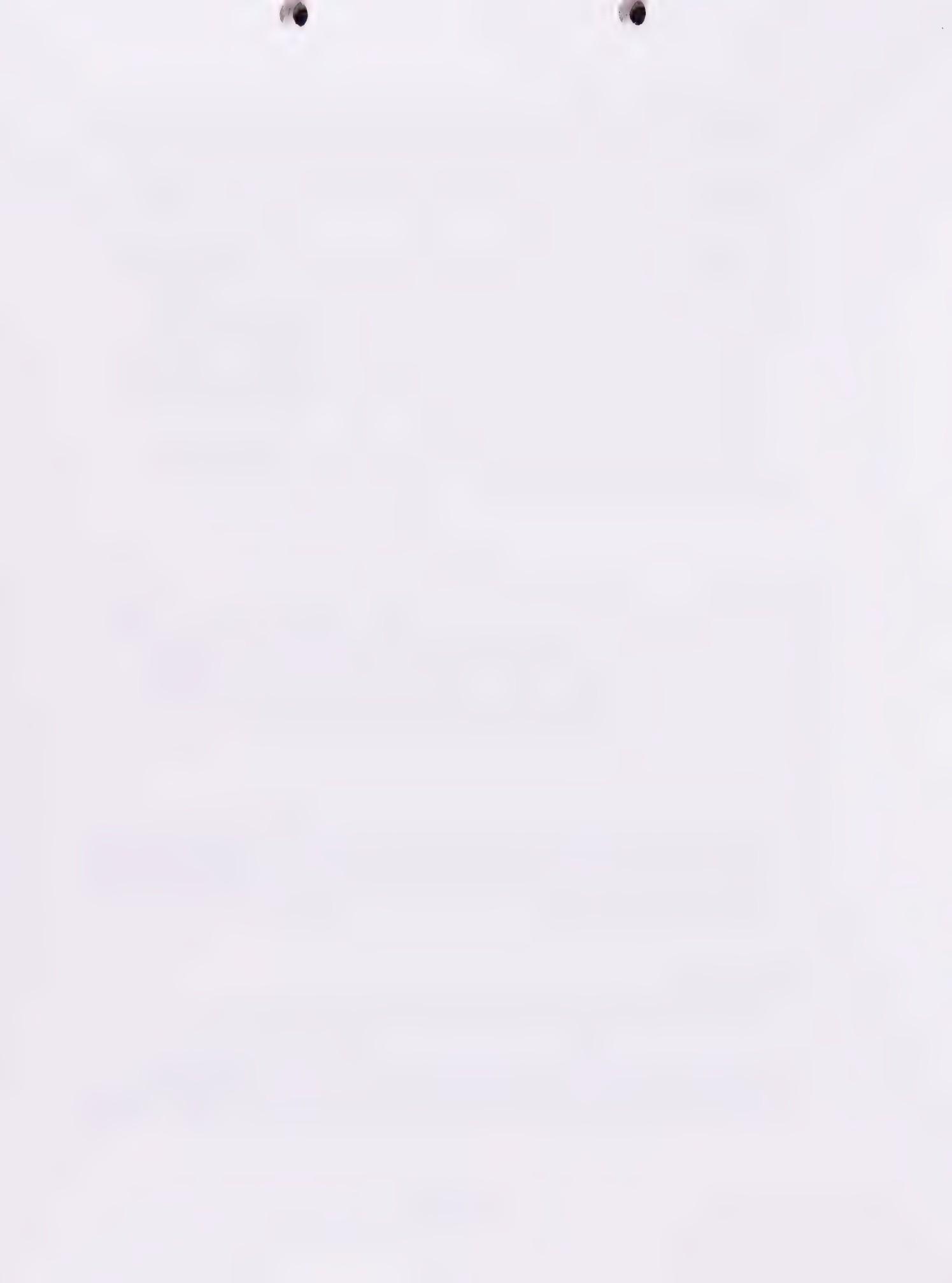
Recognizing the fact that cities and public agencies have tight budgets and little discretionary resources for devoting to these recommendations, we strongly recommend the use of self-financing implementation methods, and creative applications to other funding sources. Time prevented development of this area, but we strongly encourage additional research to be done.

Findings

- Financial costs - both short term and long term - can vary considerably between fuel management techniques. For example, the prescribed burning every five years of accumulated surface fuels under a large grove of eucalypts is far more cost effective than converting and maintaining the area as native grassland or native trees.

Recommendations

- Make use of assessable liens for non-compliance with fire codes.
- Investigate the possibility of an addition to the real estate transfer tax dedicated to fire prevention education. The funds from this tax would be made available in part to community based associations to develop volunteer



training programs in fire prevention, landscape design and maintenance, enforcement of fuel buildups and fire watch programs.

- Pursue joint applications from the Cities of Oakland and Berkeley for the State of California Department of Forestry Stewardship program grants.
- Investigate grants and other funding sources to support the development of a comprehensive vegetation management plan for the East Bay hills.

III. Immediate Erosion Control

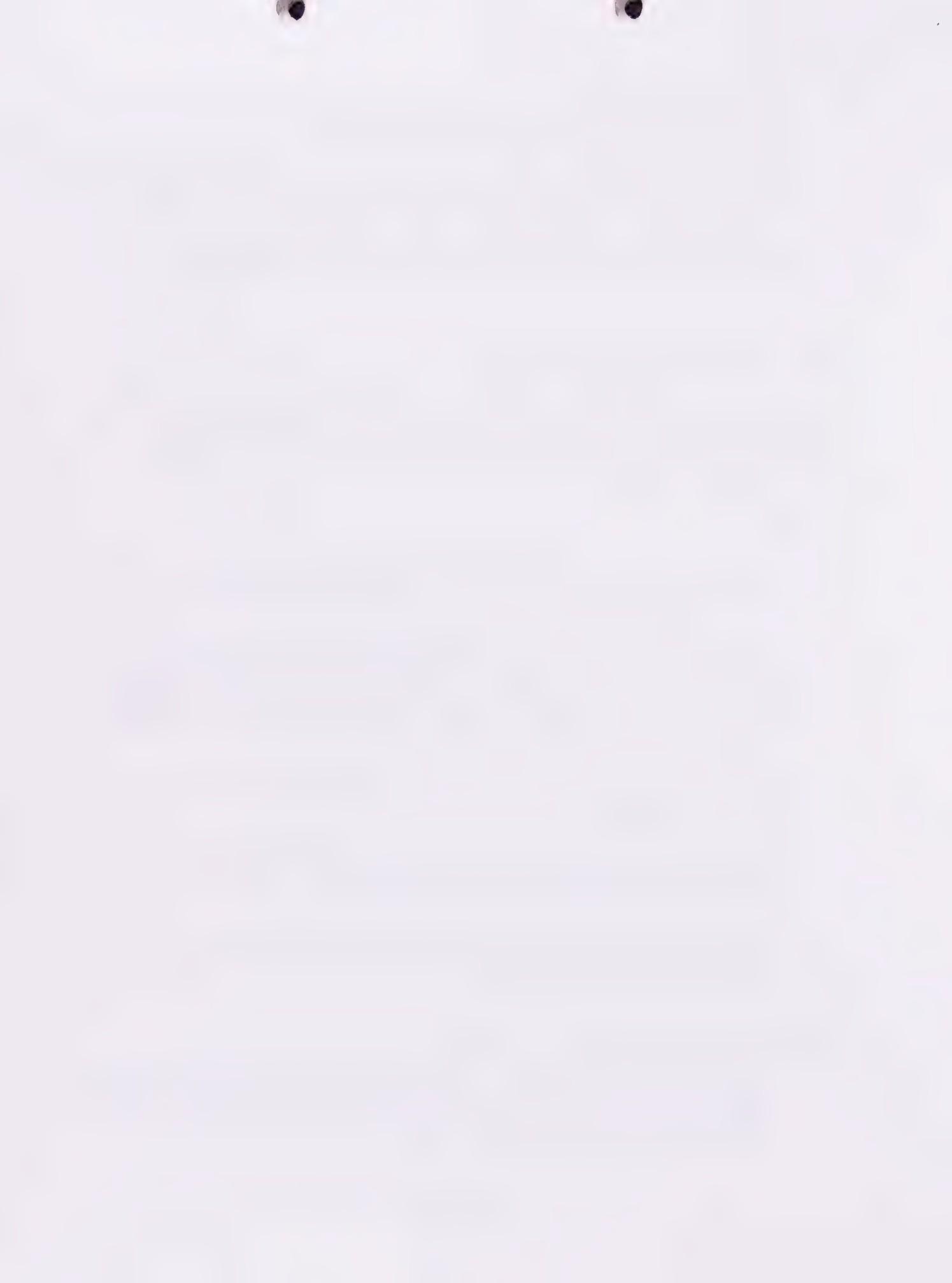
The committee reviewed the actions taken by the Cities of Berkeley and Oakland after the fire to reduce soil erosion and the danger of landslides. We also reviewed policies relating to the removal of vegetation from burned lots, and determined the following:

Findings

- Erosion (surface and gully) is occurring, and landslides are apparent in the fire-damaged area, despite preventative measures taken to date.
- The potential for further erosion and landslide activation is significant. Landslide potential is greatest in areas exhibiting previous slope instability, steep slopes, and in areas that may receive uncontrolled runoff. In areas where trees or deep rooting brush have been killed and removed, landslide potential may increase in future years.
- Further assessment and action is required to minimize further erosion and landslide activation.
- Some post-fire, surface erosion control measures that have been applied to the hills are inappropriate in this urban landscape.
- Many storm drains throughout the Berkeley and Oakland hills are antiquated, or in such poor condition that they are creating erosion problems or exacerbating existing landslides.

Policy and Implementation Recommendations

- Minimize excessive soil and site disturbances in **areas of significant erosion or landslide potential** until the end of the rainy season (mid April). This includes tree removal, grading, and debris removal.



- Re-regulate tree removals using a simplified, no-cost, ten day Tree Removal Permit process. Eucalyptus should not be exempt during the rainy season as they can increase slope stability by removing soil water and can increase soil strength by the effect of their roots.

The majority of committee members felt that eucalyptus should not be exempt from the Tree Preservation Ordinance even after April 15. However, there were two members that felt strongly eucalyptus should be exempt from the Tree ordinance as is currently the case.

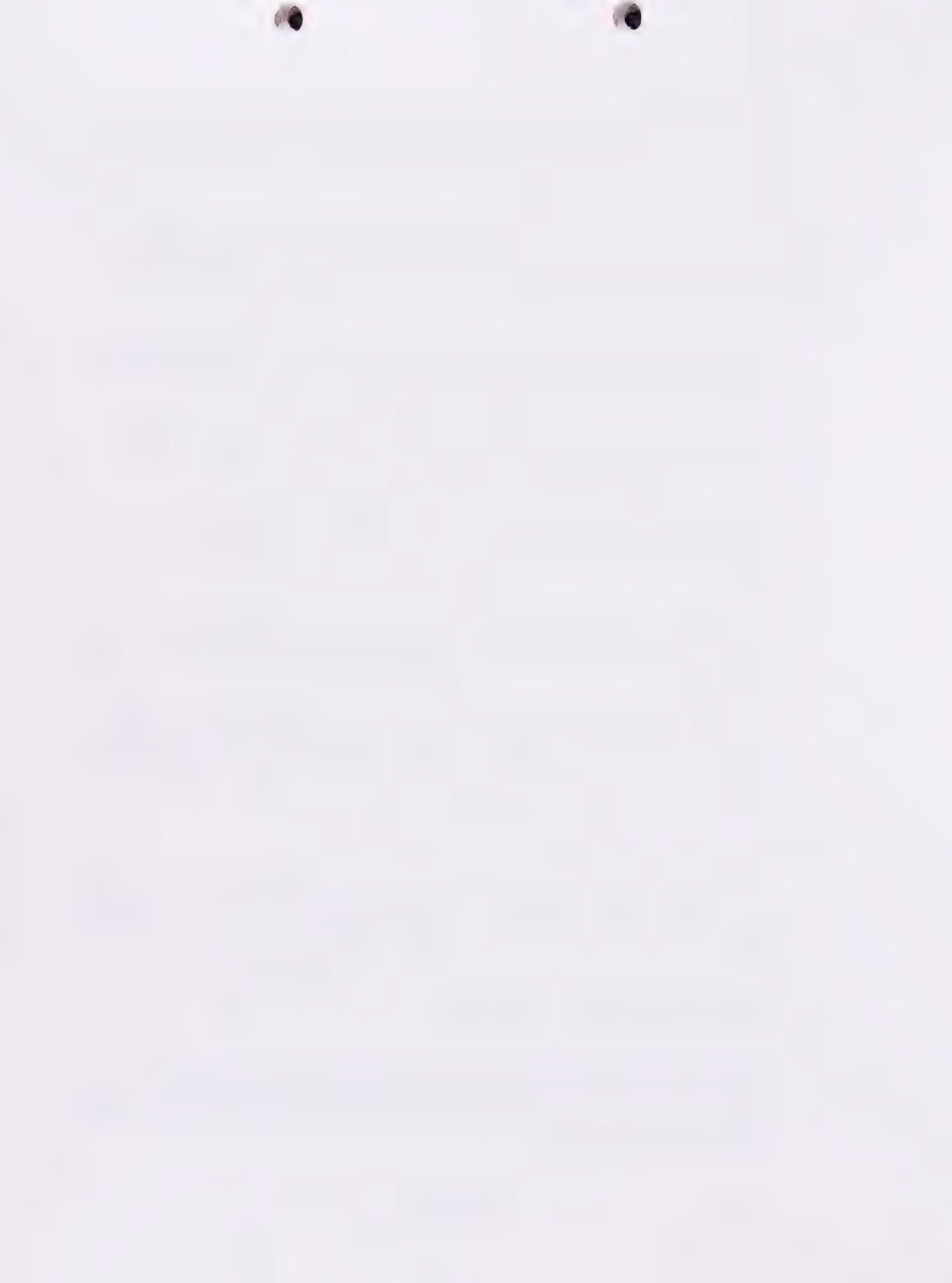
- Work immediately with insurance companies to assure that they understand why tree removals should be delayed until the end of the rainy season. This action is intended to minimize homeowner costs.
- Make slope stability maps available for public use at City offices. Use the media to inform people about availability of the maps.
- Implement the following recommendations related to soil erosion: Avoid spreading loose hay for soil erosion on hillslopes with extensive storm drain systems. This causes a maintenance problem as hay will clog the inlets.

In landslide areas, do not apply jute and/or other types of erosion control netting or hay bales, each of which can increase the amount of water into the unstable soils.

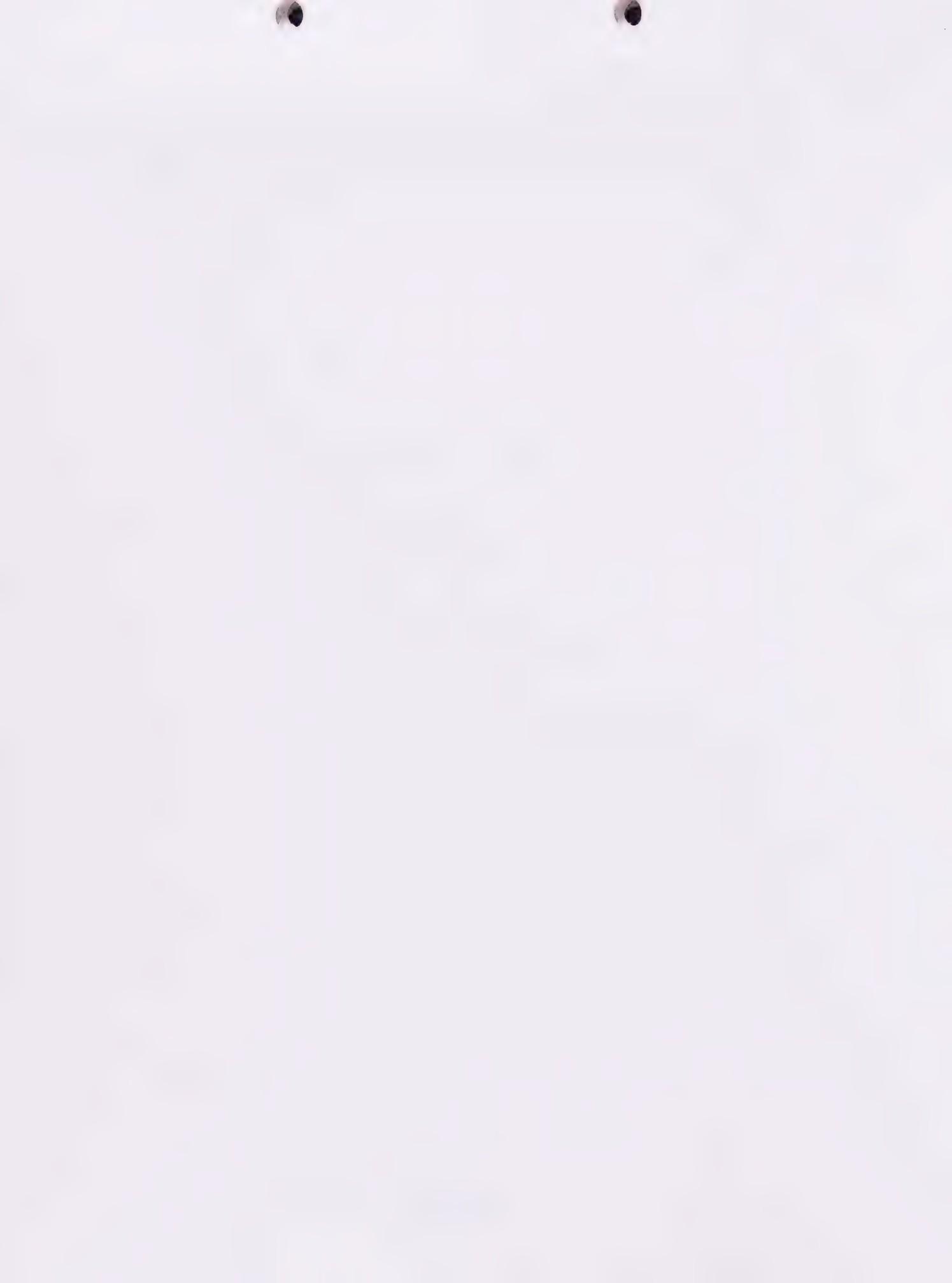
Avoid clearing or removing vegetation along stream corridors, particularly riparian species, for application of erosion control measures, (such as debris racks and erosion control netting) until appropriately assessed by an arborist following the end of the rainy season.

Other erosion control measures

- Develop procedures for mulching and hydro seeding that allow for maximum germination using agreed upon ecological principles. Analyze what caused difficulties in germination of the seeding of the hills after this last fire.
- Maintain and monitor storm drains during and following storm events. Correct problems that are observed.
- Develop a long-term solution to fixing, modifying or replacing storm drains at the source of where they have created erosion or exacerbated slope stability problems (rather than applying short term remedial actions to gullies created by storm drains).



- Based upon the new geotechnical mapping prepared by city consultants, property owners should be notified when public lands that are in a natural condition could potentially be affected by land failure and impact private property. This notification is in accord with Government Code 831.25.



**Mayors' Task Force on Emergency Preparedness
and Community Restoration**

INFRASTRUCTURE AND DEVELOPMENT COMMITTEE

BACKGROUND:

The Infrastructure and Development Committee was created to examine a host of critical issues related to the immediate rebuilding of the fire-damaged hills as well as long-term planning for future emergencies in the area. Discussion focused on evacuation planning; the opportunity to underground utilities; the need to ensure an adequate water supply for firefighting; potential street widening to improve safety and access; traffic management and logistics during reconstruction; revision of current building code policies; and employment and contract opportunities for Oakland residents and businesses.

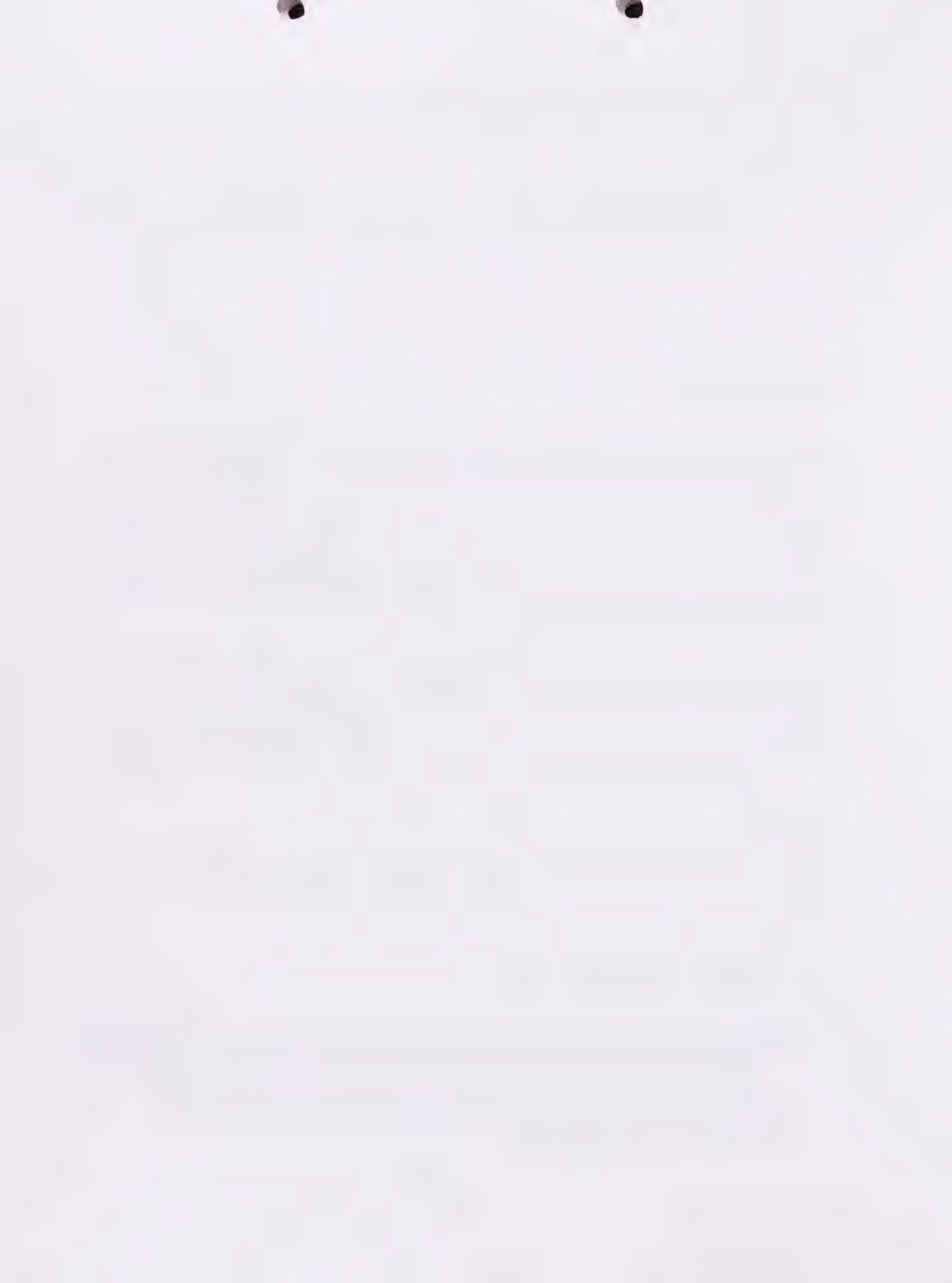
The Committee was chaired by City Councilmember Richard Spees of Oakland and Robert Harris, Division Manager of Pacific Gas & Electric (PG&E). Committee members included representatives of the local utility companies (EBMUD, PG&E), the Private Industry Council, Oakland Development Council, University of California-Berkeley, and City of Oakland's Office of Public Works.

GOALS:

After much discussion, the following goals emerged as the Committee's priorities for improving infrastructure needs and planning for the rebuilding of the fire-damaged area:

- **Enhance evacuation planning.**

Residents must be able to evacuate downhill while emergency vehicles travel uphill; on many roads such two-way traffic is impossible. Most of the deaths which resulted from the firestorm were caused by inadequate evacuation capacity and procedure. Egress and ingress capacity must be expanded throughout the Oakland Hills.



- Identify and remedy streets which need greater capacity for evacuation of residents and access for fire engines.

In the Oakland Hills, narrow streets and haphazard parking policies restricted traffic flow, resulting in evacuation bottlenecks and circulation problems for firefighters. Key evacuation and emergency response routes should be identified and minimum unobstructed street widths established and maintained within the Oakland Hills.

- **Underground utilities.**

The October 20th firestorm completely destroyed overhead utilities in the fire zone. Falling wires took the life of one firefighter, made emergency response and evacuation more difficult, and may have contributed to the fire hazard by allowing contact between overhead wires and trees. Replacement of the overhead utility system should be conducted underground.

- Improve emergency planning operations to ensure an adequate water supply for firefighting.

During the recent fire, water supply drained too rapidly, leaving firefighters without recourse to save properties and suppress the fire; in many instances, the available water pressure proved inadequate to service firefighter needs. During the power outage, the existing pumping systems which are supposed to restore water to the draining reservoirs failed. In addition, the fire hydrants in the area were not equipped with universal hose couplings, resulting in delays for out-of-City firefighters who had smaller hose connections. Improvements in the water supply should be integrated into a comprehensive firefighting strategy.

- Strengthen building codes to improve the fire resistance of houses built in the Fire Hazard Area.

On October 20th, independent fires spread along the perimeter of the firestorm in part because of inadequate building practices. Wood shake roofs, flammable sidings, and the lack of adequate vegetation management around houses contributed to the spread of the fire from house to house. Building code protection to enhance future fire suppression in the area should also be considered.



- Oakland and Berkeley residents should be given maximum opportunities to take advantage of job openings resulting from reconstruction.

The rebuilding of the affected community will require extensive contracting on the part of homeowners constructing their homes as well as public agencies seeking to rebuild infrastructure. Appropriate employment agencies within the Cities should be working with residents and businesses to provide employment opportunities where possible to qualified Oakland and Berkeley residents.

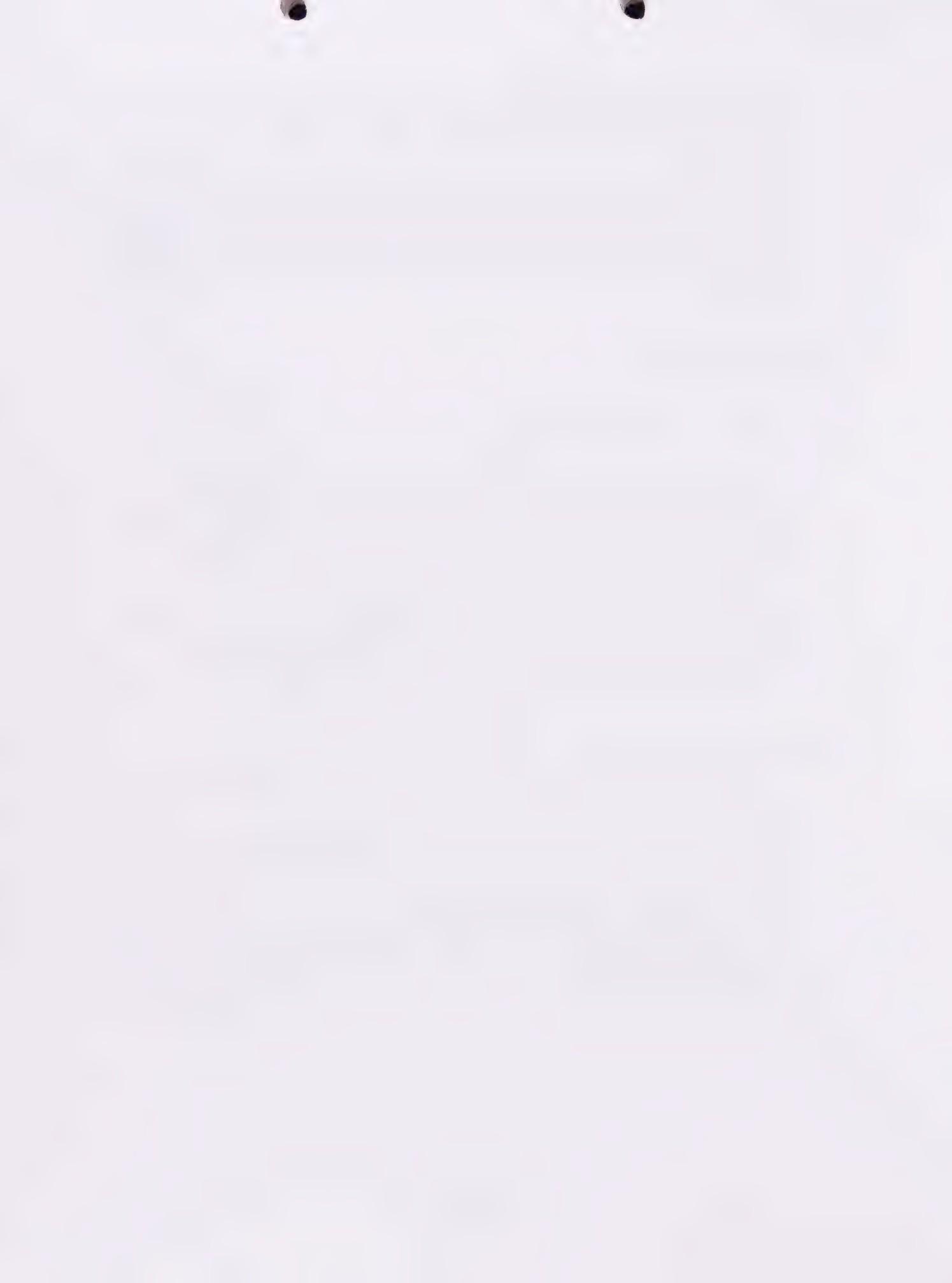
ISSUES DISCUSSED

Street Widening and Evacuation Planning:

- Can ingress and egress capacity be expanded using dirt access roads?
- Is there a need to increase the number of footpaths in the area?
- Does street widening require acquisition of additional public right of way?
- What can be done to increase fire emergency protection in areas of congregation in the hills (e.g. Cal games)?
- Is it possible to open up cul-de-sacs and eliminate long dead end streets?
- What form of alarm system is best for evacuation?
- What geographical pockets need a special strategy for evacuation?
- What kind of sequential evacuation plan can be prepared?

Undergrounding of Utilities:

- How can undergrounding of utilities be designed and implemented in the most cost-effective manner?
- What financing mechanisms are necessary to finance the undergrounding of utilities?
- What is the best method to shut off broken and leaking gas pipes during and after a large fire or earthquake disaster?
- How should individual houses be rebuilt to provide for undergrounding as a long-term expectation?
- Would undergrounding utilities prevent failure of water pumping systems?



Water Supply:

- How do we assure a water supply large enough to fight large fires?
- What should be done to ensure that all fire hydrants are operational and ensure adequate water pressure to fight a fire?
- What should be done to expand water supply and pressure?
- What should be done to include non-traditional sources of water in the firefighting water capacity?
- What financing mechanisms are best suited for funding improvements in water supply?
- What is EBMUD's capacity to support internal fire sprinklers?
- How can EBMUD expand reservoir capacity?
- Can EBMUD provide backup power and larger pumps to continue some level of water flow?
- How can EBMUD and the Fire Department create an emergency communications network?
- What will it cost to apply higher levels of water service?

Building Codes:

- Do the current Building Code requirements need to be upgraded to improve the safety of individual homes built in the fire-damaged area?
- Should all roofs be required to be constructed of Class A materials?
- What other special materials should be required?
- Should sprinklers be mandated to suppress a house fire before it can potentially ignite a fire in the wildland?
- In which areas of the fire-damaged area should these special building code requirements be enforced?

Employment Opportunities:

- What agencies should be coordinating to supply local job possibilities?
- What role can the Chamber of Commerce play in coordinating the private sector?
- What referral and training agencies should be participating?

COMMITTEE RECOMMENDATIONS

1. Street Widening and Evacuation Planning:

Recommendation:

- Apply any new street standards throughout the designated Fire Hazard Area since most neighborhoods within the Oakland Hills suffer from substandard street widths which could impede safe evacuation or easy access by emergency response vehicles.

Recommendation:

- Identify key evacuation routes within the Fire Hazard Area and require a minimum unobstructed street width through parking restrictions or street widening.

Recommendation:

- Identify designated evacuation routes and emergency response routes through appropriate signage.

Recommendation:

- Identify minimum criteria for street widths for residential streets that are used as emergency response routes to provide for fire engine access.

Recommendation:

- Notify homeowners as soon as possible of decisions regarding parking restrictions and potential street widening projects to allow for necessary front setbacks and influence the design of driveway elevations.

Recommendation:

- Conduct further analysis of the streets in the Fire Hazard Area to determine where special evacuation problems may lie and develop special evacuation plans for the affected residents.



2. Undergrounding of Utilities:

Recommendation:

- In replacing utilities on private property, mandate that all homeowners underground the service laterals from the dwelling to the property line to prepare for the potential of future undergrounding in the area.

Recommendation:

- Where total replacement is necessary, identify available funding sources to underground all utilities on the public right-of-way throughout the fire-damaged area.

Recommendation:

- Work with PG&E to investigate the possibility of installing automatic gas valve shut-offs (i.e. earthquake actuated automatic valves) in the entire Fire Hazard Area to prevent potential fires during a future seismic events.

3. Water Supply:

Recommendation:

- In cooperation with EBMUD, work to implement a modern firefighting strategy that provides fire protection equivalent to other communities. A timely study should be conducted to analyze fire flows from hydrants; water pressure throughout the area; the need for any additional hydrants; reservoir capacity; and the need for backup power to service pumping stations. The costs associated with various levels of improvements should also be identified in this study.

Recommendation:

- Identify alternative sources of water for firefighting activities such as swimming pools, lakes, and cisterns.



Recommendation:

- Investigate mechanisms to allow utilization of such additional supplies such as above ground portable delivery systems.

Recommendation:

- Study the possible retrofit of hydrants with universal hose couplings to make Oakland's system compatible with those of surrounding jurisdictions.

Recommendation:

- Request that EBMUD provide quarterly reports analyzing the performance of the existing water delivery system; such reports should include proposed incremental improvements and costs.

4. Building Codes:

Recommendation:

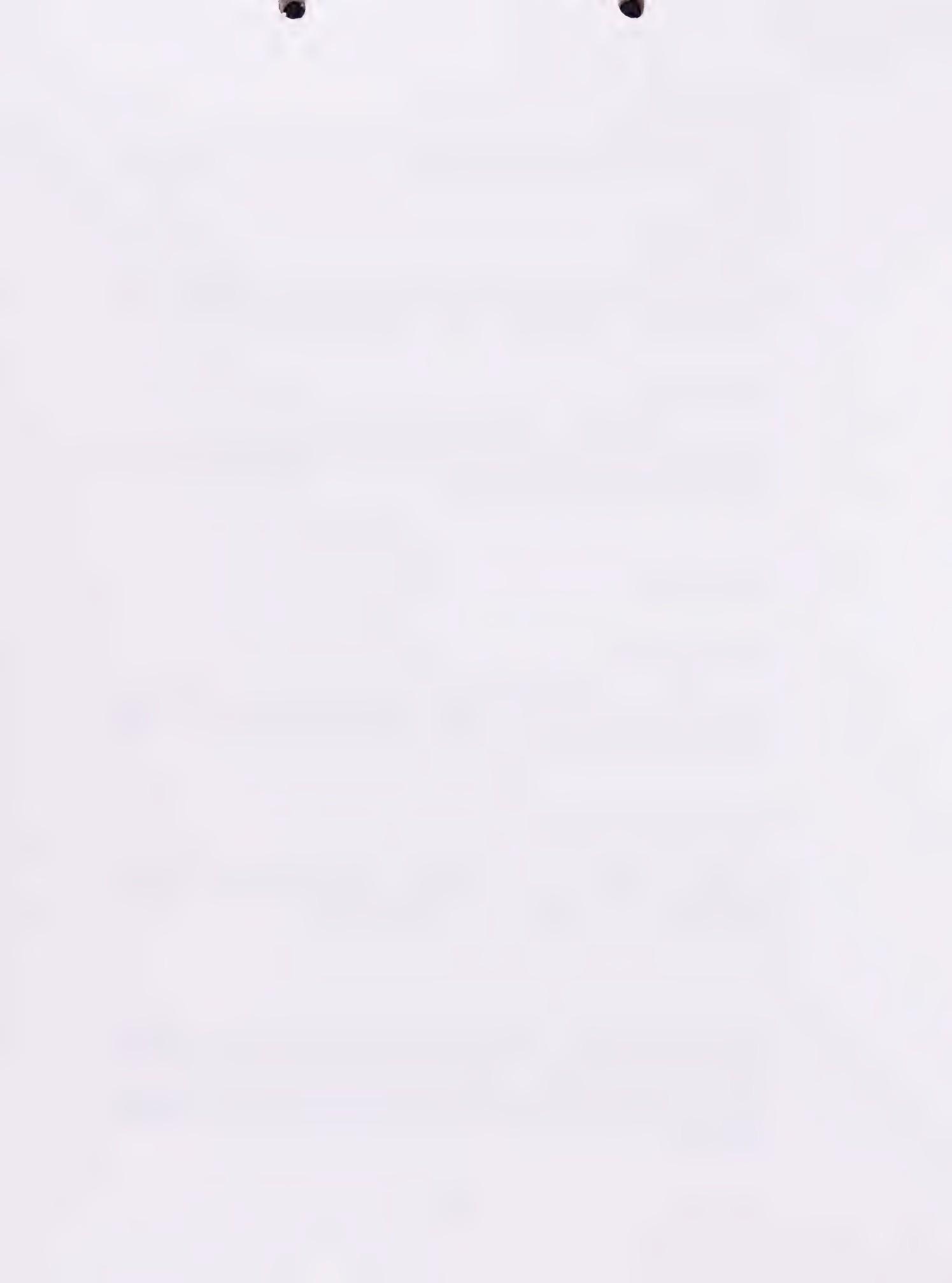
- Throughout the designated Fire Hazard Area, upgrade the current Building Code requirements for roofing materials, siding materials, and projections to prevent the spread of any future fires.

Recommendation:

- In addition to the requirements imposed for the reconstruction of houses destroyed by the fire, the City should also require Class A roofs for any re-roofing project in the designated Fire Hazard Area.

Recommendation:

- For any new construction and for rebuilding as a result of the firestorm, recommend the installation of sprinklers (the 13D system) in extreme fire hazard areas in the Oakland Hills. Internal sprinklers will suppress an internal house fire and prevent the potential ignition of an uncontrollable wildland fire.



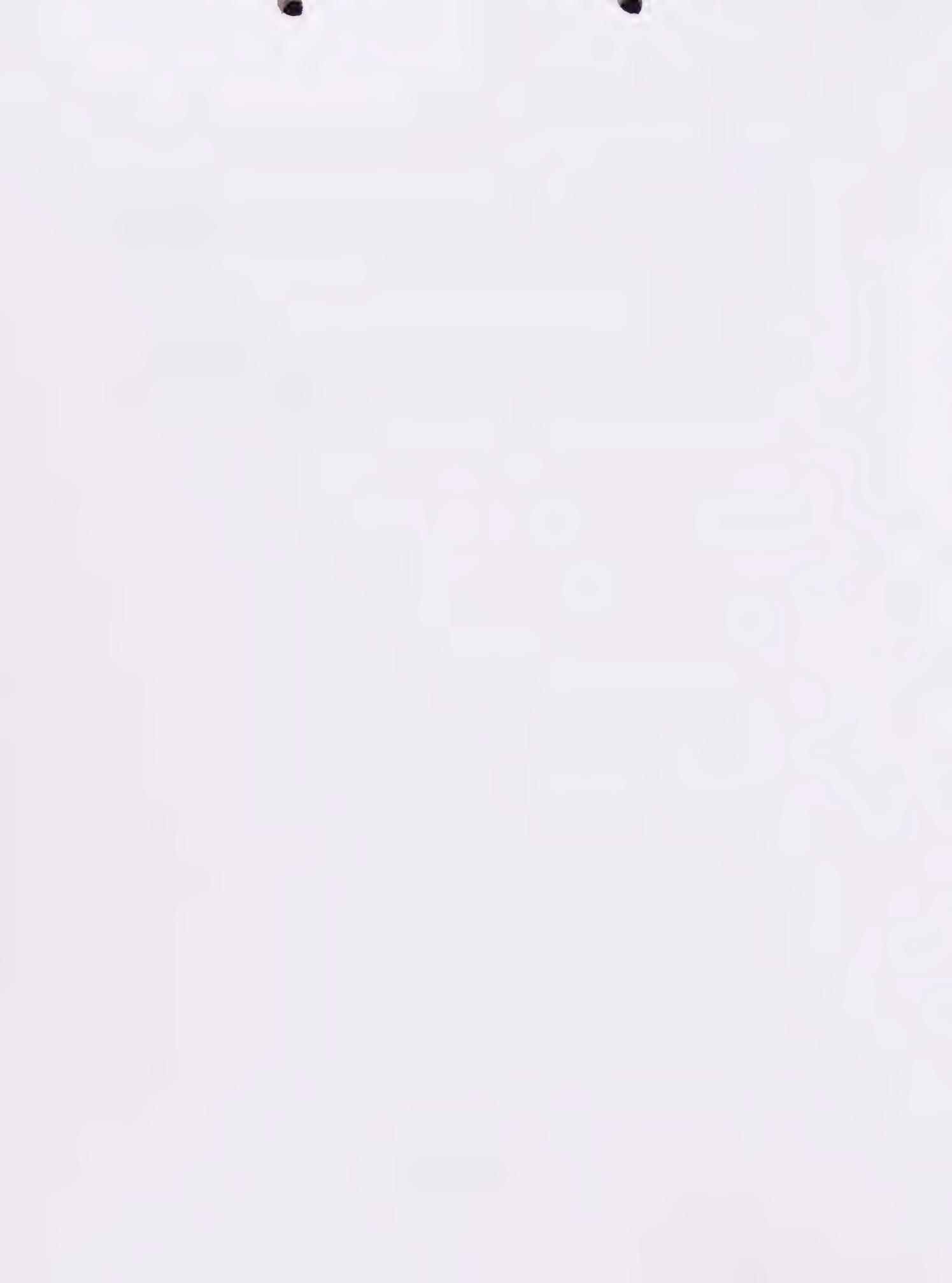
5. Employment Opportunities:

Recommendation:

- Work with the Chamber of Commerce and the Private Industry Council to identify employment and business opportunities for Oakland residents and businesses as a result of the rebuilding effort.

Recommendation:

- Work with the Private Industry Council and the Oakland Development Council to ensure that training programs be targeted to the building trades to help fill contractors' needs during the rebuilding phase.



Mayors' Task Force on Community Restoration and Emergency Preparedness

PLANNING, ZONING AND DESIGN COMMITTEE

BACKGROUND

The Committee on Planning, Zoning and Design was chaired by Fred Collignon, Berkeley City Councilmember and Professor of City and Regional Planning at the University of California-Berkeley and Peter Smith, Chair of the Oakland Planning Commission. Members of the Committee included a diverse group of planning and design professionals including city planners, architects, designers, and academics as well as representatives of several homeowners associations and the insurance industry (see list in the Appendix).

Alvin James, Planning Director for the City of Oakland, and Steve Belcher of the City Manager's Office in Berkeley attended all of the Committee's sessions and informed members of the existing rebuilding policies for each community.

To help focus discussion of the broad base of issues that were identified as falling within the Committee's purview, the members decided to prioritize issues within three specific areas: Planning; Design; and Building. Discussion tended to focus on improvements that could be made to the City's zoning review process now being implemented at the Community Restoration Development Center but long-range planning issues were also emphasized.

At the December 16th meeting, the Committee was briefed on the results of the American Institute of Architects (AIA) CEDAT (Community Emergency Design Assistance Team) workshops held throughout the fire area during the weekend of December 5-7, 1991. Members were impressed by the level of information gathered through the CEDAT process and decided to draw upon the input from residents to help prioritize issues and compile final recommendations.



GOALS:

The following planning and design goals provided a framework for determining which issues would be considered by the Committee:

- **Through the rebuilding process, encourage diversity in architectural design and site planning.**

Prior to the fire, the special character of the affected neighborhoods in the Oakland Hills was represented by a high level of diversity in architectural style, building materials, landscaping, and site planning. Houses had been built over many decades and represented a wide variety of architectural styles, construction materials, and even income levels. Building code and planning regulations as well as the design review process should not seek uniformity in design; diversity will help to recapture the original "character" of the burned neighborhoods.

- **Allow rebuilding to occur quickly by developing an expedited process for permit review.**

The swift rebuilding of this community will have far-reaching financial, psychological, and social benefits. Many homeowners are constrained by limitations in their insurance policies that necessitate rebuilding as soon as possible; for example, for many fire victims their insurance coverage for temporary housing will expire in one year. In addition, homeowners are anxious to return to their neighborhoods and their old routines as soon as possible. As the homes are rebuilt, the entire city will benefit from the return of this vital component of the community.

- **Encourage innovative parking solutions to help limit the number of cars along narrow roadways which need to be used as evacuation routes and primary access routes for emergency vehicles.**

Many of the streets within the fire area are substandard in terms of width and proved to be an obstacle to safe evacuation and fire vehicle access during the October 20th firestorm. Parking along these narrow streets exacerbates this critical problem.

- **Seek methods for incorporating some level of neighborhood input into the design review process.**

Although for the most part, neighbors trust one another to build a house that incorporates good design and site planning principles, there is an uneasiness about the motivations of newcomers to the area. Without requiring a lengthy

design review process that will slow reconstruction, neighborhood associations desire some input into the review of new projects in their area.

- **Develop mechanisms to limit the size and bulk of structures on small lots.**

The entire character of a neighborhood can be changed by the introduction of oversized structures which seek to maximize value by increasing square footage. Existing zoning which sets a height limit and requires minimum setbacks may not be enough to prevent large-scale structures which are inappropriate for the site (i.e. "Blackhawk"-style homes).

- **Underground utilities.**

The reconstruction of the fire area presents an opportunity for the affected neighborhoods to underground utilities. Every effort should be made to implement this project in conjunction with the rebuilding of the fire area.

ISSUES DISCUSSED:

- Design Guidelines
- Design Review
- Neighborhood Participation
- Zoning Code Changes
- Maintaining Architectural Diversity
- Lot Coverage / Floor Area Ratio (F.A.R.)
- View Protection
- Parking
- Secondary Units
- Public Space / Community Facilities / Light Commercial Uses
- Undergrounding of Utilities



COMMITTEE RECOMMENDATIONS:

1. Neighborhood Involvement:

Recommendation:

- Design guidelines for each of the subareas identified through the CEDAT process and refined by input from the homeowners associations should be developed and utilized in the formal project review process conducted by staff at the Community Restoration Development Center.

Recommendation:

- Neighborhood associations should be encouraged to develop voluntary architectural standards and design guidelines to be used to review proposed "new" structures (those 10% or larger than pre-existing structure). Design guidelines should be developed for individual neighborhoods and could even be broken down into "clusters" (small groups of houses that relate to one another spatially).

Recommendation:

- All Homeowners' Associations within the fire area should receive copies of the "Applications on File" at the Community Restoration Development Center on a regular basis.

Recommendation:

- Implement notice requirements for all applications for use permits and variances including the posting of signs on subject property, the publication of notices in the Tribune and Montclarion, and the mailing of notices to property owners within 300 feet. Notice should include a 10-day period for public comment.

Provide notice of any property for which a building permit application is on file at the Community Restoration Development Center (post at CRDC and publish in newspapers).

Recommendation:



- Develop a process for resolving conflicts between applicants and CRDC staff, and also for disputes between neighbors.

2. Density:

Recommendation:

- Develop mechanisms to help retain the existing density in neighborhoods.

Recommendation:

- Illegal secondary units should not be automatically legalized; such applications must be granted a permit through the existing process. Notice shall be sent to all property owners within 300 feet of the applicant and 15 days should be allowed for public comment.

Recommendation:

- Develop new parking solutions to help alleviate parking problems associated with secondary units (i.e. tandem parking; off-site parking pockets; or other innovative solutions).

Recommendation:

- Establish guidelines for the residential use of trailers and mobile homes during reconstruction; two-year sunset clause should be included.

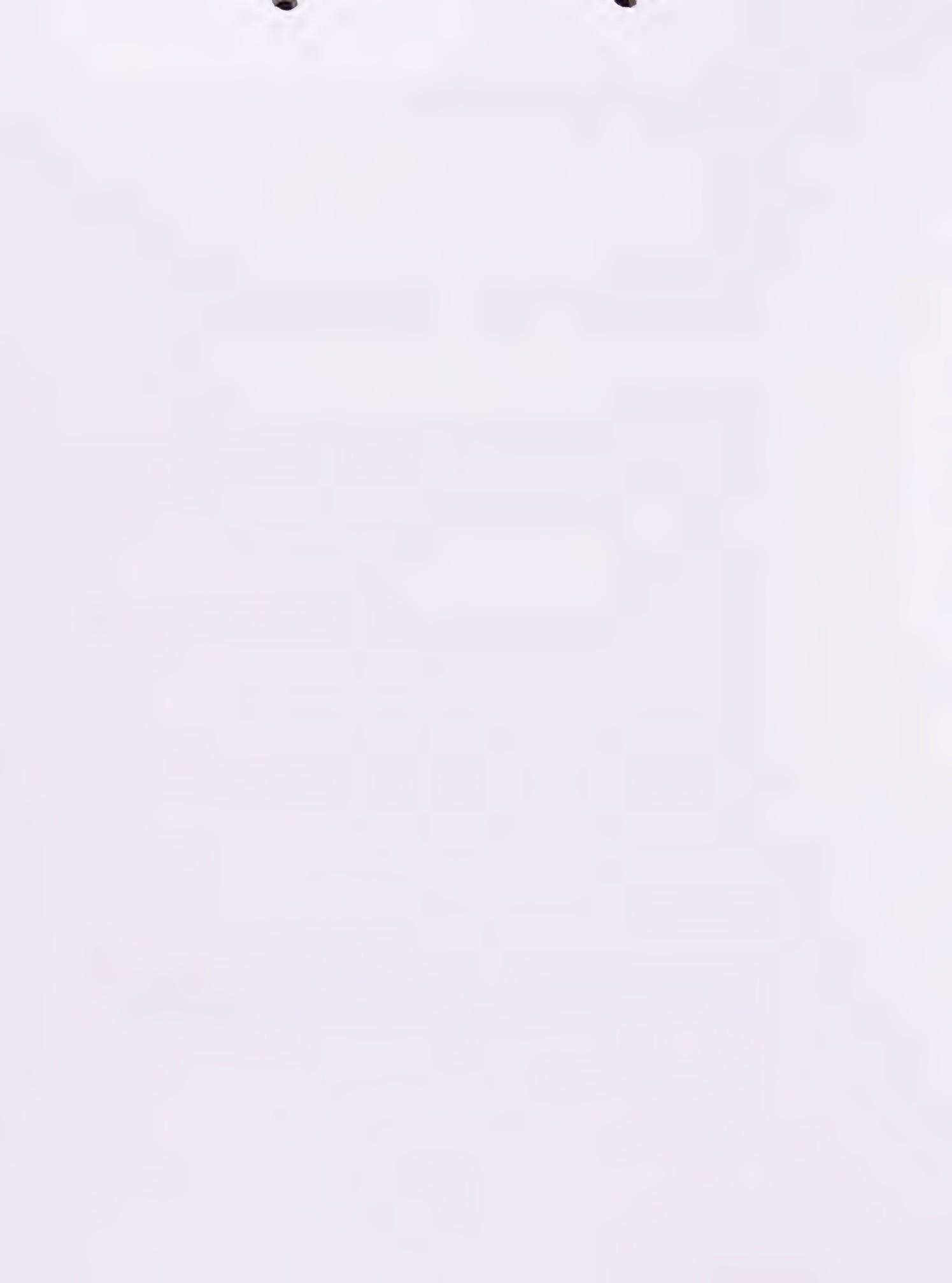
3. Lot Coverage:

Recommendation:

- Investigate (in consultation with the neighborhoods) the use of a Floor Area Ratio (F.A.R.) to limit the size of "new" structures (10% or larger than pre-existing facility). Analyze whether a minimum threshold of square footage should be established and only apply the F.A.R. to large-scale projects.

4. Setbacks/Slope/Coverage:

Recommendation:



- Conduct further analysis regarding zero lot lines and where exceptions to the side setback requirement might be allowed.

Recommendation:

- To encourage diversity in roof designs (and possibly improve access to views) and to discourage flat roofs, the method for calculating height should be revised for upslope lots to encourage pitched roofs; i.e. measure from midpoint of roof pitch and allow pitch to go higher than current limit of 32 feet.

Recommendation:

- Reduce the bulk of upslope lots at the front setback by encouraging less height at front; it is preferable for house to be stepped up the slope.

Recommendation:

- Encourage diverse front setbacks to help recreate the interesting character of the pre-existing neighborhood.

5. Parking:

Recommendation:

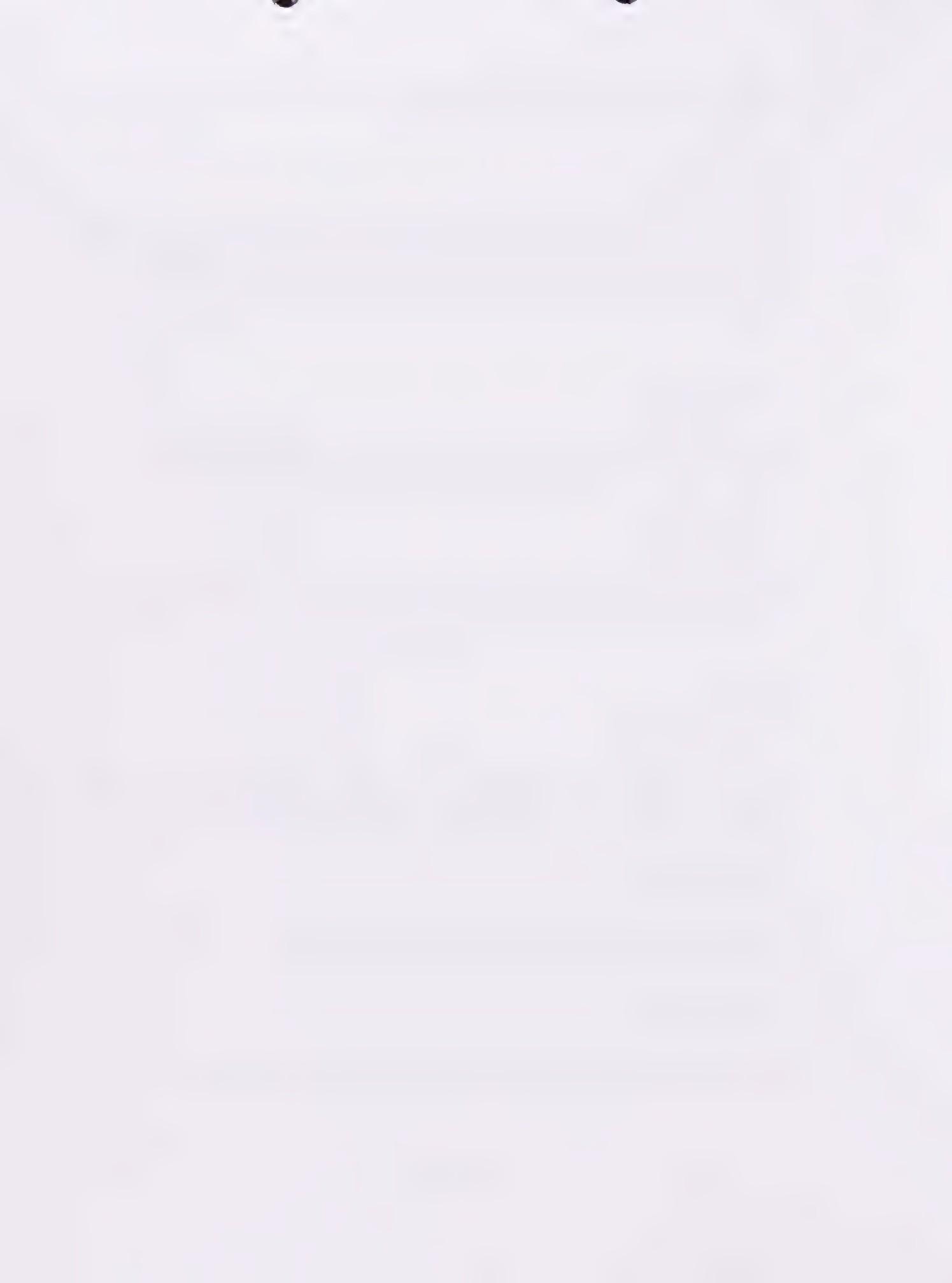
- Through the permitting and design review process, encourage homeowners to include additional on-site parking spaces to alleviate problems that will result from new parking restrictions to be imposed in their neighborhoods.

Recommendation:

- Conduct a comprehensive analysis of streets in the fire area to determine where opportunities for additional parking may exist.

Recommendation:

- Investigate tandem parking for areas with steep lots and limited parking.



6. Construction Phase:

Recommendation:

- Develop a plan to coordinate construction which includes parking and transportation for employees, staging areas for materials, and traffic management in the Hills.

7. Additional Resources:

Recommendation:

- Create a model of the entire fire area to demonstrate the design and progress of housing development. Investigate available NASA computer models and the potential use of the technology developed in U.C. Berkeley's Environmental Simulation Lab.

8. Permit Processing:

Recommendation:

- Exempt homeowners seeking to rebuild substantially the "same size" structure (i.e. same size and same design as that which existed prior to the fire) from design review and develop new regulations to expedite permit approval for these projects.

Recommendation:

- Ensure that permits will be processed expeditiously to assist the rebuilding of the community and alleviate the potential financial burdens for homeowners who have limited insurance policies.

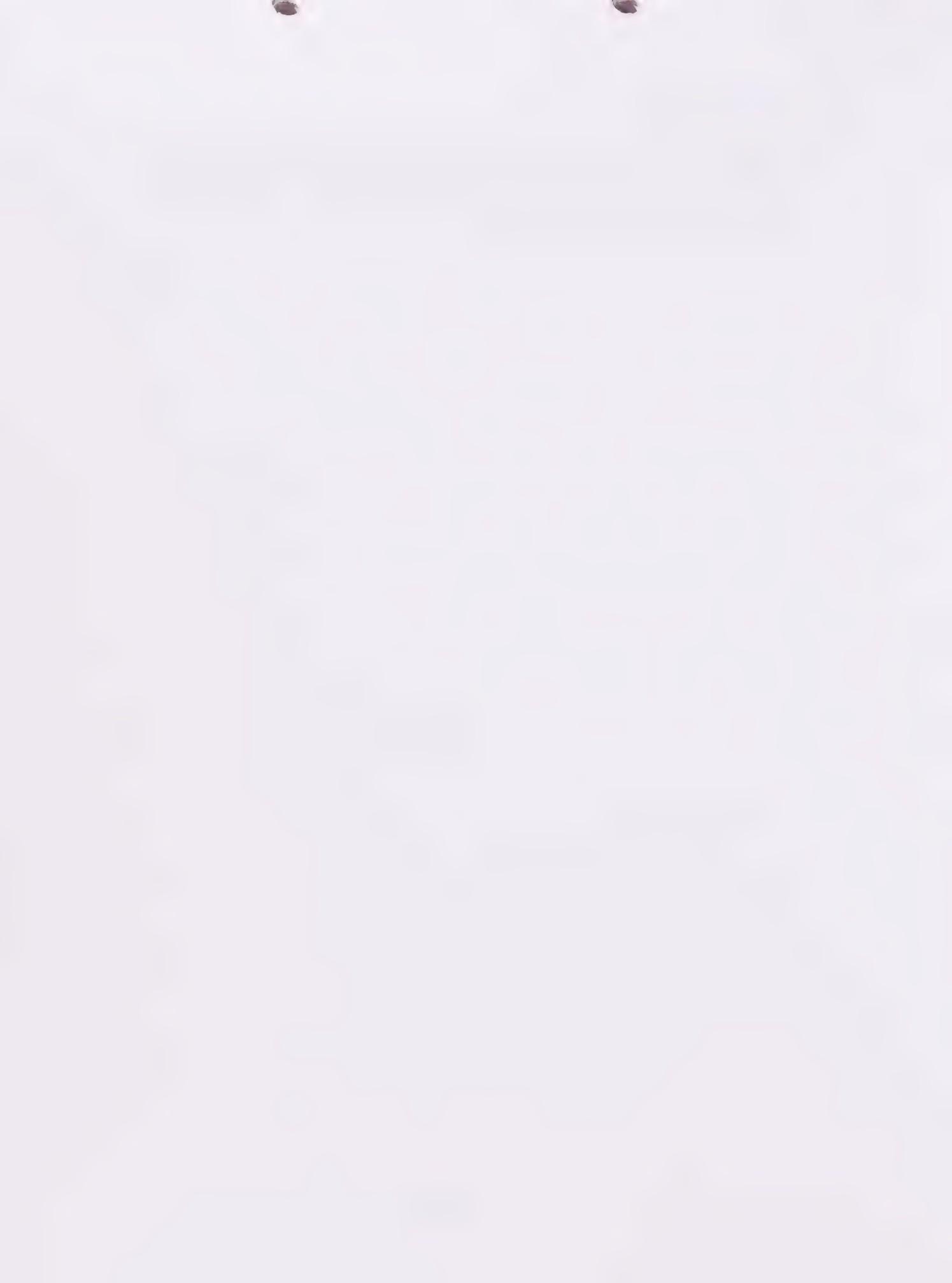
Recommendation:

- In developing a new permitting process, do not differentiate between current owners and new residents purchasing burned lots in the area; there is an advantage in coordinating the rules and regulations for rebuilding in the area through one uniform process.



Recommendation:

- Due to the special nature of the design and rebuilding of multi-family structures, permit applications for Hiller Highlands and the Parkwoods Apartments should be subject to existing regulations for design review, environmental review, and planning.



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